# WEST

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Main Menu | Search Form | Posting Counts | Show S Numbers | Edit S Numbers | Preferences

**Search Results -**

| Terms | Documents |
|---|---|
| (VWF or willebrand) same (tumor$ or tumour$ or cancer$) | 239 |

**Database:** US Patents Full-Text Database; US Pre-Grant Publication Full-Text Database; JPO Abstracts Database; EPO Abstracts Database; Derwent World Patents Index; IBM Technical Disclosure Bulletins

Refine Search: (VWF or willebrand) same (tumor$ or tumour$ or cancer$) Clear

**Search History**

**Today's Date: 4/26/2001**

| DB Name | Query | Hit Count | Set Name |
|---|---|---|---|
| USPT,PGPB,JPAB,EPAB,DWPI | (VWF or willebrand) same (tumor$ or tumour$ or cancer$) | 239 | L2 |
| USPT,PGPB,JPAB,EPAB,DWPI | (VWF or willebrand) near (tumor$ or tumour$ or cancer$) | 0 | L1 |

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Trying 3106016892...Open

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LOGINID:ssspta1644axd
PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2


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 NEWS  1          Web Page URLs for STN Seminar Schedule - N. America
 NEWS  2  Dec 17  The CA Lexicon available in the CAPLUS and CA files
 NEWS  3  Feb 06  Engineering Information Encompass files have new names
 NEWS  4  Feb 16  TOXLINE no longer being updated
 NEWS  5  Apr 23  Search Derwent WPINDEX by chemical structure
 NEWS  6  Apr 23  PRE-1967 REFERENCES NOW SEARCHABLE IN CAPLUS AND CA

 NEWS EXPRESS  April 18 CURRENT WINDOWS VERSION IS V6.0,
               CURRENT MACINTOSH VERSION IS V5.0C (ENG) AND V5.0JB (JP),
               AND CURRENT DISCOVER FILE IS DATED 04/06
 NEWS HOURS    STN Operating Hours Plus Help Desk Availability
 NEWS INTER    General Internet Information
 NEWS LOGIN    Welcome Banner and News Items
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FILE 'HOME' ENTERED AT 08:54:02 ON 26 APR 2001

=> file medline caplus embase biosis
COST IN U.S. DOLLARS                                  SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                       0.15       0.15

FILE 'MEDLINE' ENTERED AT 08:54:15 ON 26 APR 2001

FILE 'CAPLUS' ENTERED AT 08:54:15 ON 26 APR 2001
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FILE 'BIOSIS' ENTERED AT 08:54:15 ON 26 APR 2001
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=> s (vascular (5N) target?)(P) (tumor? or tumour? or cancer?)
L1          498 (VASCULAR (5N) TARGET?)(P) (TUMOR? OR TUMOUR? OR CANCER?)

=> s l1 (P) (willebrand or VWF)
L2            4 L1 (P) (WILLEBRAND OR VWF)

=> dup rem l2
PROCESSING COMPLETED FOR L2
L3            1 DUP REM L2 (3 DUPLICATES REMOVED)

=> dis l3 ibib abs kwic

L3   ANSWER 1 OF 1  MEDLINE                                  DUPLICATE 1
ACCESSION NUMBER:   2001137685     MEDLINE
DOCUMENT NUMBER:    20568605   PubMed ID: 11116073
TITLE:              Genetic induction of a releasable pool of factor VIII in
                    human endothelial cells.
AUTHOR:             Rosenberg J B; Greengard J S; Montgomery R R
CORPORATE SOURCE:   Blood Research Institute, The Blood Center of Southeastern
                    Wisconsin, Milwaukee, WI, USA.
CONTRACT NUMBER:    HL-33721 (NHLBI)
                    HL-44612 (NHLBI)
                    MO1-RR00058 (NCRR)
SOURCE:             Arterioscler Thromb Vasc Biol, (2000 Dec) 20 (12) 2689-95.
                    Journal code: DC1. ISSN: 1524-4636.
PUB. COUNTRY:       United States
                    Journal; Article; (JOURNAL ARTICLE)
LANGUAGE:           English
FILE SEGMENT:       Priority Journals
ENTRY MONTH:        200103
ED                  Entered STN: 20010404
                    Last Updated on STN: 20010404
                    Entered PubMed: 20001220
                    Entered Medline: 20010308
AB   Although it is known that factor VIII (FVIII) plasma levels increase
     rapidly in response to a number of stimuli, the biological stimuli behind
     this release is less clear. Previously, we showed that FVIII can traffic
     together with von Willebrand factor (vWF) into storage
     granules in a pituitary tumor cell line, AtT-20; however, AtT-20
     cells could not be used to address the release or functional activity of
     released FVIII. To investigate the regulated secretion of stored FVIII,
     endothelial cells with intact agonist-stimulated release pathways were
     used. Human umbilical vein endothelial cells (HUVECs) were transduced with
     retroviral FVIII construct [hFVIII(V)] to create a FVIII/vWF
     storage pool. Immunofluorescent staining of transduced cells demonstrated
     FVIII in Weibel-Palade bodies. In contrast, the transduction of hFVIII(V)
     into HT-1080 and HepG2 cells displayed FVIII only in the cytoplasm. We
     studied the regulated release of both FVIII and vWF from
     endothelial cells after agonist-induced stimulation and demonstrated a
     parallel release of FVIII and vWF proteins. This released FVIII
     was functionally active. Hence, endothelial cells transduced with
     hFVIII(V) store FVIII together with vWF in Weibel-Palade bodies,
     creating a releasable storage pool of both proteins. Because FVIII
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secretion can be physiologically regulated by agonists in culture, this may explain the pharmacological agonist-induced release of FVIII by drugs such as desmopressin in vivo and suggests **vascular** endothelium as a reasonable **target** of gene therapy of hemophilia A.

AB . . . stimuli, the biological stimuli behind this release is less clear. Previously, we showed that FVIII can traffic together with von **Willebrand** factor (**vWF**) into storage granules in a pituitary **tumor** cell line, AtT-20; however, AtT-20 cells could not be used to address the release or functional activity of released FVIII.. . . release pathways were used. Human umbilical vein endothelial cells (HUVECs) were transduced with retroviral FVIII construct [hFVIII(V)] to create a FVIII/**vWF** storage pool. Immunofluorescent staining of transduced cells demonstrated FVIII in Weibel-Palade bodies. In contrast, the transduction of hFVIII(V) into HT-1080 and HepG2 cells displayed FVIII only in the cytoplasm. We studied the regulated release of both FVIII and **vWF** from endothelial cells after agonist-induced stimulation and demonstrated a parallel release of FVIII and **vWF** proteins. This released FVIII was functionally active. Hence, endothelial cells transduced with hFVIII(V) store FVIII together with **vWF** in Weibel-Palade bodies, creating a releasable storage pool of both proteins. Because FVIII secretion can be physiologically regulated by agonists. . . in culture, this may explain the pharmacological agonist-induced release of FVIII by drugs such as desmopressin in vivo and suggests **vascular** endothelium as a reasonable **target** of gene therapy of hemophilia A.

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=> dis his

     (FILE 'HOME' ENTERED AT 08:54:02 ON 26 APR 2001)

     FILE 'MEDLINE, CAPLUS, EMBASE, BIOSIS' ENTERED AT 08:54:15 ON 26 APR 2001
L1          498 S (VASCULAR (5N) TARGET?)(P) (TUMOR? OR TUMOUR? OR CANCER?)
L2            4 S L1 (P) (WILLEBRAND OR VWF)
L3            1 DUP REM L2 (3 DUPLICATES REMOVED)

=> s (vascula? (5N) target?)(P) (tumor? or tumour? or cancer?)
L4          825 (VASCULA? (5N) TARGET?)(P) (TUMOR? OR TUMOUR? OR CANCER?)

=> s l4 (P) (willebrand  or vwf)
L5            6 L4 (P) (WILLEBRAND OR VWF)

=> dup rem l5
PROCESSING COMPLETED FOR L5
L6            2 DUP REM L5 (4 DUPLICATES REMOVED)

=> dis l6 kwic

L6   ANSWER 1 OF 2  MEDLINE                                  DUPLICATE 1
AB   . . . stimuli, the biological stimuli behind this release is less
     clear. Previously, we showed that FVIII can traffic together with von
     Willebrand factor (vWF) into storage granules in a
     pituitary tumor cell line, AtT-20; however, AtT-20 cells could
     not be used to address the release or functional activity of released
     FVIII.. . . release pathways were used. Human umbilical vein
     endothelial cells (HUVECs) were transduced with retroviral FVIII construct
     [hFVIII(V)] to create a FVIII/vWF storage pool.
     Immunofluorescent staining of transduced cells demonstrated FVIII in
     Weibel-Palade bodies. In contrast, the transduction of hFVIII(V) into
     HT-1080 and HepG2 cells displayed FVIII only in the cytoplasm. We studied
     the regulated release of both FVIII and vWF from endothelial
     cells after agonist-induced stimulation and demonstrated a parallel
     release of FVIII and vWF proteins. This released FVIII was
     functionally active. Hence, endothelial cells transduced with hFVIII(V)
     store FVIII together with vWF in Weibel-Palade bodies, creating
     a releasable storage pool of both proteins. Because FVIII secretion can be
     physiologically regulated by agonists. . . in culture, this may explain
     the pharmacological agonist-induced release of FVIII by drugs such as
     desmopressin in vivo and suggests vascular endothelium as a
     reasonable target of gene therapy of hemophilia A.


=> dis l6 2 ibib abs kwic

L6   ANSWER 2 OF 2  MEDLINE                                  DUPLICATE 2
ACCESSION NUMBER:   1998003006      MEDLINE
DOCUMENT NUMBER:    98003006   PubMed ID: 9344321
TITLE:              Isolation limb perfusion with tumor necrosis factor alpha
                    and chemotherapy for advanced extremity soft tissue
                    sarcomas.
AUTHOR:             Eggermont A M; Schraffordt Koops H; Klausner J M; Lienard
                    D; Kroon B B; Schlag P M; Ben-Ari G; Lejeune F J
CORPORATE SOURCE:   University Hospital Rotterdam, Daniel den Hoed Cancer
                    Center, The Netherlands.
SOURCE:             SEMINARS IN ONCOLOGY, (1997 Oct) 24 (5) 547-55.
                    Journal code: UN5; 0420432. ISSN: 0093-7754.
PUB. COUNTRY:       United States
                    (CLINICAL TRIAL)
                    (CONTROLLED CLINICAL TRIAL)
                    Journal; Article; (JOURNAL ARTICLE)
                    (MULTICENTER STUDY)
LANGUAGE:           English
FILE SEGMENT:       Priority Journals
ENTRY MONTH:        199711
ED                  Entered STN: 19971224
                    Last Updated on STN: 20000303
                    Entered Medline: 19971104
AB   The unique property of high dose recombinant tumor necrosis
     factor alpha (rTNF alpha) is to activate and selectively destroy the
     tumor-associated microvasculature. For the systemic application of
     rTNF alpha it has been shown that the maximum tolerated dose (MTD) is 10
     times less than the effective dose in animals. The main toxicity
     corresponds to systemic inflammatory response syndrome with a decrease in
     vascular resistance and hypotension. We found that it is possible to
     administer rTNF alpha at 10 times the MTD in an isolated limb perfusion
     (ILP) system with heart-lung machine, for locally advanced extremity soft
     tissue sarcomas. One hundred forty patients received an ILP with high-dose
     TNF alpha. In 55 patients treated with the combination of high-dose rTNF
     alpha + interferon-gamma + melphalan an overall objective response rate of
     87% with 36% complete responses was observed; it was 81% and 28%,
     respectively, in a group treated with TNF alpha and melphalan (n = 85).
     Angiographic and immunohistological studies showed the selective and early
     damage of the sarcoma-associated microvasculature preceded by the
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upregulation of adhesion molecules and intratumoral leak of von **Willebrand** factor. **Tumor** invasion by platelets and, in some cases, by polymorphonuclear cells, appeared within hours after the application of rTNFa long before the lysis of the **tumor**. Thus, ILP with high-dose TNF alpha and chemotherapy seems to act through a dual **targeting**: TNF hits the **tumor** associated **vasculature**, and chemotherapy attacks the **tumor** cells. Therefore, ILP with TNF is a new option in the management of locally advanced soft tissue sarcoma of the extremities.

AB The unique property of high dose recombinant **tumor** necrosis factor alpha (rTNF alpha) is to activate and selectively destroy the **tumor**-associated microvasculature. For the systemic application of rTNF alpha it has been shown that the maximum tolerated dose (MTD) is 10. . . . selective and early damage of the sarcoma-associated microvasculature preceded by the upregulation of adhesion molecules and intratumoral leak of von **Willebrand** factor. **Tumor** invasion by platelets and, in some cases, by polymorphonuclear cells, appeared within hours after the application of rTNFa long before the lysis of the **tumor**. Thus, ILP with high-dose TNF alpha and chemotherapy seems to act through a dual **targeting**: TNF hits the **tumor** associated **vasculature**, and chemotherapy attacks the **tumor** cells. Therefore, ILP with TNF is a new option in the management of locally advanced soft tissue sarcoma of the. . .

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=> dis his

     (FILE 'HOME' ENTERED AT 08:54:02 ON 26 APR 2001)

     FILE 'MEDLINE, CAPLUS, EMBASE, BIOSIS' ENTERED AT 08:54:15 ON 26 APR 2001
L1           498 S (VASCULAR (5N) TARGET?)(P) (TUMOR? OR TUMOUR? OR CANCER?)
L2             4 S L1 (P) (WILLEBRAND OR VWF)
L3             1 DUP REM L2 (3 DUPLICATES REMOVED)
L4           825 S (VASCULA? (5N) TARGET?)(P) (TUMOR? OR TUMOUR? OR CANCER?)
L5             6 S L4 (P) (WILLEBRAND OR VWF)
L6             2 DUP REM L5 (4 DUPLICATES REMOVED)

=> s (vascula?)(P) (tumor? or tumour? or cancer?)
L7         66918 (VASCULA?)(P) (TUMOR? OR TUMOUR? OR CANCER?)

=> s l7 (P) (VWF or willebrand
UNMATCHED LEFT PARENTHESIS 'P) (VWF'
The number of right parentheses in a query must be equal to the
number of left parentheses.

=> s l7 (P) (VWF or willebrand)
L8           582 L7 (P) (VWF OR WILLEBRAND)

=> dup rem l8
PROCESSING COMPLETED FOR L8
L9           215 DUP REM L8 (367 DUPLICATES REMOVED)

=> dis l9 1-215 ibib kwic

L9   ANSWER 1 OF 215  CAPLUS  COPYRIGHT 2001 ACS
ACCESSION NUMBER:        2001:168738  CAPLUS
TITLE:                   Cyclin D1, retinoblastoma, p53, and Her2/neu protein
                         expression in preinvasive breast pathologies:
                         correlation with vascularity
AUTHOR(S):               Heffelfinger, Sue C.; Yassin, Rawia; Miller, Mary Ann;
                         Lower, Elyse E.
CORPORATE SOURCE:        Departments of Pathology and Laboratory Medicine,
                         University of Cincinnati, Cincinnati, OH, 45267-0529,
                         USA
SOURCE:                  Pathobiology (2001), 68(3), 129-136
                         CODEN: PATHEF; ISSN: 1015-2008
PUBLISHER:               S. Karger AG
DOCUMENT TYPE:           Journal
LANGUAGE:                English
REFERENCE COUNT:         29
REFERENCE(S):            (1) Alle, K; Clin Cancer Res 1998, V4, P847 CAPLUS
                         (3) Bouvet, M; Cancer Res 1998, V58, P2288 CAPLUS
                         (4) Buerger, H; J Pathol 1999, V189, P521 CAPLUS
                         (8) Gillett, C; J Pathol 1998, V184, P396 CAPLUS
                         (9) Grant, S; Cancer Detect Prev 1998, V22, P185
                             CAPLUS
                         ALL CITATIONS AVAILABLE IN THE RE FORMAT
AB   Objectives: Preinvasive breast pathologies show a degree of
     vascularization that correlates with risk of invasion. Recently,
     numerous oncogenes and tumor suppressor genes have been shown to
     regulate neovascularization. Therefore, we examd. archival tissues of
     preinvasive breast pathologies by immunohistochem. for alterations in the
     expression of four proteins, cyclin D1, retinoblastoma (Rb), p53, and
     Her2/neu, known to be important in breast tumorgenesis, and
     correlated these data with tissue vascularity. Methods:
     Vascularity was detd. by immunol. detection of von
     Willebrand factor. For carcinoma in situ (CIS) both stromal
     vascularity (MVD) and vascular cuffing (MCD) were detd.
     Results: We found that cyclin D1 expression was increased in usual
     hyperplasia (11% of cases). Atypical hyperplasia, noncomedo CIS and
     comedo CIS were pos. in 43, 49, and 57% of cases, resp. Changes in Rb and
     p53 were rare in hyperplasia but occurred in 8 and 10% of CIS, resp.
     Her2/neu protein was identified rarely in atypical hyperplasia and in both
     noncomedo and comedo ductal CIS. Neither Rb nor Her2/neu expression
     correlated with vascularity. P53 immunoreactivity correlated
     pos. with both MCD and MVD. Cyclin D1 was neg. assocd. with MVD.
     Conclusion: These data suggest that p53 and cyclin D1 proteins may
     regulate the microvessel d. of preinvasive breast pathologies.

L9   ANSWER 2 OF 215  MEDLINE                                  DUPLICATE 1
ACCESSION NUMBER:    2001134999      MEDLINE
DOCUMENT NUMBER:     21083993   PubMed ID: 11215279
TITLE:               Prognostic value of vascularity and vascular endothelial
                     growth factor expression in non-small cell lung cancer.
AUTHOR:              Baillie R; Carlile J; Pendleton N; Schor A M
CORPORATE SOURCE:    Unit of Cell and Molecular Biology, Dental School,
                     University of Dundee, Park Place, Dundee DD1 4HR, UK.
SOURCE:              JOURNAL OF CLINICAL PATHOLOGY, (2001 Feb) 54 (2) 116-20.
                     Journal code: HT3. ISSN: 0021-9746.
PUB. COUNTRY:        England: United Kingdom
                     Journal; Article; (JOURNAL ARTICLE)
LANGUAGE:            English
FILE SEGMENT:        Abridged Index Medicus Journals; Priority Journals
```

ENTRY MONTH: 200103
ED Entered STN: 20010404
Last Updated on STN: 20010404
Entered PubMed: 20010215
Entered Medline: 20010301

AB AIMS: High expression of the angiogenic factor **vascular** endothelial growth factor (VEGF) in **tumours** has been found to be associated with poor prognosis in some studies, but not in others. The aims of this study were to determine the prognostic value of VEGF in operable non-small cell lung **cancer** (NSCLC) and its possible association with **vascularity**. METHODS: Sections from 81 NSCLC archival specimens were stained with antibodies to von **Willebrand** factor (**vWF**) and VEGF. **Vascularity** was measured by the average density of **vWF** positive vessels. VEGF expression in **tumour** cells was assessed by consensus of two independent observers according to three indices, namely: (1) percentage of area stained, (2) intensity of staining, and (3) final score (product of area and intensity). RESULTS: VEGF immunoreactivity was present in all **tumours** and adjacent normal lung tissue. None of the three VEGF indices was associated with **vascularity** or the clinical parameters examined. Mean survival times were shorter in patients with high VEGF expression, but the difference was not significant. This applied to the full cohort of patients, or when analysed separately according to **tumour** type or stage. However, high VEGF expression was associated with poor survival in patients with high **vascularity** ($p = 0.02$). VEGF had no discriminant value among patients with low **vascularity** . **Vascularity** had no prognostic value, except for late stage patients (UICC stages II and IIIa combined; $n = 36$), where high **vascularity** was associated with longer survival ($p = 0.01$). CONCLUSIONS: VEGF on its own has no prognostic value in NSCLC, but may become a useful indicator when combined with **vascularity**. VEGF may play a physiological role in the normal lung.

L9 ANSWER 3 OF 215 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2001:292853 CAPLUS
TITLE: Endothelial Dysfunction, Nitric Oxide and Platelet Activation in Hypertensive and Diabetic Type II Patients
AUTHOR(S): Ouvina, S. M.; La Greca, R. D.; Zanaro, N. L.; Palmer, L.; Sassetti, B.
CORPORATE SOURCE: Facultad de Ciencias Exactas y Naturales, Departamento de Quimica Biologica, Universidad de Buenos Aires, Buenos Aires, Argent.
SOURCE: Thromb. Res. (2001), 102(2), 107-114
CODEN: THBRAA; ISSN: 0049-3848
PUBLISHER: Elsevier Science Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Alterations in the synthesis or enhanced inactivation of nitric oxide (NO) and an increase in endothelin-1 prodn. lead to an imbalance that can induce arterial hypertension. Type II diabetes is characterized by impaired endothelium-dependent vasodilation and **vascular** disease. NO is produced through l-arginine pathway by three different isoforms of nitric oxide synthase (NOS), an inducible form that can be activated by cytokines such as **tumor** necrosis factor .alpha. (TNF.alpha.). We evaluated NO plasmatic levels, endothelial damage markers such as von **Willebrand** factor (**vWF**), platelet activation, sol. P-selectin (sP-Sel), TNF.alpha. levels, insulinemia (I), glycosylated Hb (HbA1c), glycemia and blood pressure in 32 hypertensive diabetic type II patients (Group A), 37 hypertensive patients (Group B) and 35 healthy subjects (Group C) matched in sex, age, body mass index and dietary habits. The level of I was increased in patients compared to the controls and correlated with their NO levels. **vWF** plasmatic levels were increased in Group A compared to Groups B and C. We also found significant differences in platelet activation among all the groups. In diabetic patients, increased NO levels correlated with TNF.alpha., HbA1c and platelet activation showed greater endothelial damage than in Group B. These parameters described a prothrombotic state assocd. with an insulin resistance state, an increased **vWF** release, raised sP-Sel and TNF.alpha. levels and, maybe, low NO bioavailability, which could lead to a higher risk of development of thrombotic events in hypertensive diabetic patients (Group A) than in the hypertensive patients in Group B.

L9 ANSWER 4 OF 215 CAPLUS COPYRIGHT 2001 ACS DUPLICATE 2
ACCESSION NUMBER: 2001:102928 CAPLUS
TITLE: Increased soluble P-selectin in patients with haematological and breast cancer: a comparison with fibrinogen, plasminogen activator inhibitor and von Willebrand factor
AUTHOR(S): Blann, A. D.; Gurney, D.; Wadley, M.; Bareford, D.; Stonelake, P.; Lip, G. Y. H.
CORPORATE SOURCE: Haemostasis, Thrombosis and Vascular Biology Unit, University Department of Medicine, City Hospital, Birmingham, B18 7QH, UK
SOURCE: Blood Coagulation Fibrinolysis (2001), 12(1), 43-50
CODEN: BLFIE7; ISSN: 0957-5235
PUBLISHER: Lippincott Williams & Wilkins
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 38
REFERENCE(S): (1) Aigner, S; Blood 1997, V89, P3385 CAPLUS
(8) Blann, A; Thromb Haemost 1995, V74, P626 CAPLUS
(14) Files, J; Blood 1981, V58, P607 CAPLUS
(18) Gamble, J; Science 1990, V249, P414 CAPLUS
(20) Hayward, R; Cardiovasc Res 1999, V41, P65 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB Abnormal platelet activation and an increased risk of thrombosis are frequent findings in **cancer**. As sol. adhesion mol. P-selectin is being increasingly recognized as reflecting increased platelet activation, we hypothesized raised levels in patients with **cancer** , obtaining plasma from 24 patients with a cross-section of haematol. **cancers**, 41 with breast **cancer**, and from an equal no. of healthy controls for each patient group. Levels of sol. P-selectin were compared with those of von **Willebrand** factor (**vWf**), plasminogen activator inhibitor-1 (PAI-1) activity and fibrinogen (markers of endothelial integrity, fibrinolysis and coagulation, resp.). We found raised sol. P-selectin, fibrinogen and **vWf** in both patient groups compared with their controls ($P < 0.01$). **vWf** and sol. P-selectin were higher in the haematol. **cancers** than in breast **cancer** patients (by 30 and 74%, resp.; both $P < 0.01$). There was no significant difference in levels of PAI-1 between any group. There were no differences in sol. P-selectin or **vWf** when the data from the women with breast **cancer** were classified according to

tumor size, lymph node involvement or presence of vascular invasion. We conclude that the platelet marker sol. P-selectin is raised in both haematol. and breast cancer, and is higher in the former, but is unrelated to the type or stage of breast cancer.

L9 ANSWER 5 OF 215 MEDLINE DUPLICATE 3
ACCESSION NUMBER: 2001077248 MEDLINE
DOCUMENT NUMBER: 21002567 PubMed ID: 11118063
TITLE: Modulation of tumor angiogenesis by stem cell factor.
AUTHOR: Zhang W; Stoica G; Tasca S I; Kelly K A; Meininger C J
CORPORATE SOURCE: Cardiovascular Research Institute and Department of Medical Physiology, The Texas A&M University System Health Science Center, College Station, Texas 77843-1114, USA.
SOURCE: CANCER RESEARCH, (2000 Dec 1) 60 (23) 6757-62. Journal code: CNF. ISSN: 0008-5472.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200101
ED Entered STN: 20010322
Last Updated on STN: 20010322
Entered PubMed: 20001212
Entered Medline: 20010111

AB Mast cells accumulate within solid tumors and can release many angiogenic factors, suggesting that they may modulate vascularization of tumors. Stem cell factor (SCF) stimulates mast cell migration, proliferation, and degranulation and therefore may influence mast cell behavior within tumors. We investigated the contribution of SCF to tumor angiogenesis by manipulating its level in mammary tumors. Sense or antisense cDNA fragments of rat SCF were ligated into an episomal expression vector. Ethylnitrosourea-induced rat mammary tumor cell lines were transfected with vector containing either control (no insert, C-P), sense (S-P), or antisense (AS-P) SCF DNA. The. . . functional nature of the transfectants was confirmed by measuring SCF in cell lysates and conditioned media. Immunohistochemical analysis of the tumors induced in Berlin-Druckrey rats by these transfected cells demonstrated that mast cell number and microvascular density were significantly higher in S-P tumors and significantly lower in AS-P tumors, compared with C-P tumors. The expression of von Willebrand factor, an endothelial cell marker, showed a similar pattern. AS-P tumors were significantly smaller than either C-P or S-P tumors. These data suggest that SCF modulates tumor growth and angiogenesis via the involvement of mast cells.

L9 ANSWER 6 OF 215 CAPLUS COPYRIGHT 2001 ACS DUPLICATE 4
ACCESSION NUMBER: 2001:83354 CAPLUS
TITLE: A phase II study of razoxane, an antiangiogenic topoisomerase II inhibitor, in renal cell cancer with assessment of potential surrogate markers of angiogenesis
AUTHOR(S): Braybrooke, Jeremy P.; O'Byrne, Kenneth J.; Propper, David J.; Blann, Andrew; Saunders, Mark; Dobbs, Nicola; Han, Cheng; Woodhull, Jane; Mitchell, Karen; Crew, Jeremy; Smith, Kenneth; Stephens, Ross; Ganesan, Trivadi S.; Talbot, Denis C.; Harris, Adrian L.
CORPORATE SOURCE: Imperial Cancer Research Fund Medical Oncology Unit, and Department of Urology, Churchill Hospital, Oxford, OX3 7LJ, UK
SOURCE: Clin. Cancer Res. (2000), 6(12), 4697-4704
CODEN: CCREF4; ISSN: 1078-0432
PUBLISHER: American Association for Cancer Research
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 50
REFERENCE(S): (5) Brock, T; Am J Pathol 1991, V138, P213 CAPLUS
(6) Byrne, G; J Natl Cancer Inst (Bethesda) 2000, V92, P1329 CAPLUS
(8) Creaven, P; J Pharm Pharmacol 1975, V27, P914 CAPLUS
(11) Dinney, C; Cancer Res 1998, V58, P808 CAPLUS
(13) Eisen, T; Br J Cancer 2000, V82, P812 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB Renal cell carcinoma (RCC) is an angiogenic tumor resistant to std. cytotoxic chemotherapeutic agents. Although often responsive to immunomodulatory agents including interleukin 2 and IFN-.alpha., the overall results in randomized Phase III studies are disappointing with only modest improvements in overall survival. This Phase II study evaluated the efficacy and tolerability of razoxane, an antiangiogenic topoisomerase II inhibitor, in 40 patients (32 men, 8 women; age: range, 31-76 yr; median, 58 yr) with inoperable RCC. Twenty patients received razoxane 125 mg p.o., twice a day for 5 days each week for 8 wk (one cycle). This was repeated in patients with stable disease (StD), but was discontinued after 16 wk if there was no evidence of an objective response. Because minimal toxicity was seen, subsequent patients (n = 20) were treated until progressive disease (PD) was documented. Of 38 evaluable patients, 11 (29%) had StD for a min. of 4 mo, and the remainder had PD. Median overall survival was 7.3 mo. Duration of survival was significantly better in patients with StD compared with those with PD (P = 0.003). The effect of treatment on six potential surrogate serum/plasma ( vascular endothelial growth factor (VEGF), basic fibroblast growth factor (bFGF), urokinase plasminogen activator sol. receptor (uPAsr), E-selectin, vascular cell adhesion mol.-1 (VCAM-1) and von Willebrand's factor (vWF) and two urinary (VEGF and bFGF) markers of angiogenesis was evaluated before and after 1 cycle of treatment. Pretreatment serum VEGF and E-selectin levels above the median value were assocd. with a poor prognosis. Serum VCAM-1 levels and urinary VEGF levels rose significantly after one cycle in patients with PD but not in those with StD. Serum VEGF, bFGF, VCAM-1 and vWF, plasma uPAsr and urinary bFGF levels were significantly higher in PD patients compared with StD patients before and/or after 1 cycle of treatment. In conclusion, razoxane is an antiangiogenic agent that has minimal toxicity and that requires further evaluation in combination with other active agents in the treatment of RCC. Surrogate serum and urinary markers of angiogenesis may have a role to play in predicting disease response and overall survival in RCC.

L9 ANSWER 7 OF 215 MEDLINE DUPLICATE 5
ACCESSION NUMBER: 2001133979 MEDLINE
DOCUMENT NUMBER: 21076736 PubMed ID: 11205298
TITLE: Angiogenesis and vasodilation in skin warts. Association with HPV infection.

AUTHOR: Harada K; Lu S; Chisholm D M; Syrjanen S; Schor A M
CORPORATE SOURCE: Oral Diseases Group, Dental School, University of Dundee, Park Place, Dundee DD1 4HR, Scotland, UK.
SOURCE: ANTICANCER RESEARCH, (2000 Nov-Dec) 20 (6B) 4519-23. Journal code: 59L. ISSN: 0250-7005.
PUB. COUNTRY: Greece
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200103
ED Entered STN: 20010404
Last Updated on STN: 20010404
Entered PubMed: 20010206
Entered Medline: 20010301

AB BACKGROUND: Angiogenesis is required for **tumour** growth. Since human papillomavirus (HPV) infection is associated with the development of neoplastic lesions, the aim of this study was to determine the possible association between HPV infection and angiogenesis in benign **tumours**. MATERIALS AND METHODS: Specimens of skin warts which were either negative for HPV types 1, 2, 3 and 4 (HPV-ve;. . . n = 15), or positive for HPV2 (HPV+ve; n = 19) were compared with normal skin (NS, n = 10). **Vascularity** and inflammation were assessed in consecutive sections. vWF-positive blood vessels were classified as small or large using a cut-off value of 50 microns diameter. RESULTS: **Vascularity** values for small vessels increased significantly from NS to HPV-ve warts and from HPV-ve to HPV+ve warts. Large vessels were found only in warts and their abundance was not related to HPV status. No significant association was found between **vascularity** and inflammation or between **vascularity** values for small and large vessels. CONCLUSIONS: The development of skin warts is accompanied by angiogenesis and vasodilation and these. . .

L9 ANSWER 8 OF 215 MEDLINE DUPLICATE 6
ACCESSION NUMBER: 2000431000 MEDLINE
DOCUMENT NUMBER: 20406543 PubMed ID: 10951569
TITLE: Human endothelial cells expressing polyoma middle T induce tumors.
AUTHOR: Primo L; Roca C; Ferrandi C; Lanfrancone L; Bussolino F
CORPORATE SOURCE: Institute for Cancer Research and Treatment, Candiolo, Torino, Italy.
SOURCE: ONCOGENE, (2000 Jul 27) 19 (32) 3632-41. Journal code: ONC; 8711562. ISSN: 0950-9232.
PUB. COUNTRY: ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200009
ED Entered STN: 20000922
Last Updated on STN: 20000922
Entered Medline: 20000912

AB . . . T oncogene of murine polyomavirus (PymT) rapidly transforms and immortalizes murine embryonic endothelial cells (EC), leading to the formation of **vascular tumors** in newborn mice, by recruitment of host, non-transformed EC. These **tumors** are reminiscent of human **vascular tumors** like cavernous hemangioma, Kaposi's sarcoma or those characterizing Kasabach-Merrit syndrome. Here we investigate the in vitro and in vivo behavior. . . or controls done here, mT expressing EC (PymT-EC) derived by infection with pLX-PymT retrovirus induce hemangiomas in nu/nu mice. These **tumors** contain not only human cells but also recruited mouse EC as shown by the presence of human and murine CD31 positive EC. In vitro analysis shows that PymT-EC retain endothelial specific markers like CD31, Von **Willebrand** factor, and VE-cadherin, and reach the confluence without signs of overgrowth. They are also responsive to **vascular** endothelial growth factor-A. However, their proliferation rate is increased. The balance between urokinase-type plasminogen activator and plasminogen activator inhibitor-1 is. . .

L9 ANSWER 9 OF 215 MEDLINE DUPLICATE 7
ACCESSION NUMBER: 2000269783 MEDLINE
DOCUMENT NUMBER: 20269783 PubMed ID: 10807776
TITLE: In vitro differentiation of endothelial cells from AC133-positive progenitor cells.
AUTHOR: Gehling U M; Ergun S; Schumacher U; Wagener C; Pantel K; Otte M; Schuch G; Schafhausen P; Mende T; Kilic N; Kluge K; Schafer B; Hossfeld D K; Fiedler W
CORPORATE SOURCE: Department of Hematology/Oncology, University Hospital Eppendorf, Hamburg, Germany.. gehling@uke.uni-hamburg.de
SOURCE: BLOOD, (2000 May 15) 95 (10) 3106-12. Journal code: A8G; 7603509. ISSN: 0006-4971.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 200006
ED Entered STN: 20000622
Last Updated on STN: 20000622
Entered Medline: 20000613

AB . . . granulocyte colony-stimulating factor-mobilized peripheral blood have the capacity to differentiate into endothelial cells (ECs). When cultured in the presence of **vascular** endothelial growth factor (VEGF) and the novel cytokine stem cell growth factor (SCGF), AC133(+) progenitors generate both adherent and proliferating. . . adherent population reveals that the majority display endothelial features, including the expression of KDR, Tie-2, Ulex europaeus agglutinin-1, and von **Willebrand** factor. Electron microscopic studies of these cells show structures compatible with Weibel-Palade bodies that are found exclusively in **vascular** endothelium. AC133-derived nonadherent cells give rise to both hematopoietic and endothelial colonies in semisolid medium. On transfer to fresh liquid. . . mice with severe combined immunodeficiency, AC133-derived cells form new blood vessels in vivo when injected subcutaneously together with A549 lung **cancer** cells. These data indicate that the AC133(+)-cell population consists of progenitor and stem cells not only with hematopoietic potential but. . .

L9 ANSWER 10 OF 215 MEDLINE DUPLICATE 8
ACCESSION NUMBER: 2001137685 MEDLINE
DOCUMENT NUMBER: 20568605 PubMed ID: 11116073
TITLE: Genetic induction of a releasable pool of factor VIII in human endothelial cells.
AUTHOR: Rosenberg J B; Greengard J S; Montgomery R R
CORPORATE SOURCE: Blood Research Institute, The Blood Center of Southeastern Wisconsin, Milwaukee, WI, USA.

CONTRACT NUMBER: HL-33721 (NHLBI)
HL-44612 (NHLBI)
MO1-RR00058 (NCRR)
SOURCE: Arterioscler Thromb Vasc Biol, (2000 Dec) 20 (12) 2689-95.
Journal code: DC1. ISSN: 1524-4636.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200103
ED Entered STN: 20010404
Last Updated on STN: 20010404
Entered PubMed: 20001220
Entered Medline: 20010308

AB . . . stimuli, the biological stimuli behind this release is less clear. Previously, we showed that FVIII can traffic together with von **Willebrand** factor (**vWF**) into storage granules in a pituitary **tumor** cell line, AtT-20; however, AtT-20 cells could not be used to address the release or functional activity of released FVIII.. . . release pathways were used. Human umbilical vein endothelial cells (HUVECs) were transduced with retroviral FVIII construct [hFVIII(V)] to create a FVIII/**vWF** storage pool. Immunofluorescent staining of transduced cells demonstrated FVIII in Weibel-Palade bodies. In contrast, the transduction of hFVIII(V) into HT-1080 and HepG2 cells displayed FVIII only in the cytoplasm. We studied the regulated release of both FVIII and **vWF** from endothelial cells after agonist-induced stimulation and demonstrated a parallel release of FVIII and **vWF** proteins. This released FVIII was functionally active. Hence, endothelial cells transduced with hFVIII(V) store FVIII together with **vWF** in Weibel-Palade bodies, creating a releasable storage pool of both proteins. Because FVIII secretion can be physiologically regulated by agonists. . . in culture, this may explain the pharmacological agonist-induced release of FVIII by drugs such as desmopressin in vivo and suggests **vascular** endothelium as a reasonable target of gene therapy of hemophilia A.

L9 ANSWER 11 OF 215 MEDLINE DUPLICATE 9
ACCESSION NUMBER: 2000400210 MEDLINE
DOCUMENT NUMBER: 20383299 PubMed ID: 10928164
TITLE: High levels of apoptosis are associated with improved survival in non-small cell lung cancer.
AUTHOR: Macluskey M; Baillie R; Chandrachud L M; Pendleton N; Schor A M
CORPORATE SOURCE: Oral Diseases Group, Dental School, University of Dundee, U.K.
SOURCE: ANTICANCER RESEARCH, (2000 May-Jun) 20 (3B) 2123-8.
Journal code: 59L; 8102988. ISSN: 0250-7005.
PUB. COUNTRY: Greece
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200008
ED Entered STN: 20000824
Last Updated on STN: 20000824
Entered Medline: 20000817

AB **Tumour** growth is accompanied by angiogenesis and reduced apoptosis in experimental animals. The aim of this study was to examine the prognostic value of apoptosis and the association between apoptosis and **vascularity** in non-small cell lung **cancer** (NSCLC). Following in-situ end-labelling of DNA, apoptotic cells were quantified by three different indices: as a percentage, either counting total cells (AI-tc) or point-counting (AI-pc), or as cells per area (AI-area). Blood vessels were stained with **vWF** antibody and **vascularity** was quantified by three methods. Median values for AI-tc, AI-pc and AI-area were 0.38, 0.32 and 10.7, respectively. High values. . . All three apoptotic indices were significantly correlated with each other, but no correlation was found between indices of apoptosis and **vascularity**. As previously reported, **vascularity** had no prognostic value. These results indicate that, in NSCLC, **vascularity** is not informative, but apoptotic index may be a useful prognostic factor.

L9 ANSWER 12 OF 215 MEDLINE DUPLICATE 10
ACCESSION NUMBER: 2000492562 MEDLINE
DOCUMENT NUMBER: 20417755 PubMed ID: 10961878
TITLE: Immobilized platelets support human colon carcinoma cell tethering, rolling, and firm adhesion under dynamic flow conditions.
AUTHOR: McCarty O J; Mousa S A; Bray P F; Konstantopoulos K
CORPORATE SOURCE: Department of Chemical Engineering, Department of Medicine, Johns Hopkins University, Baltimore, MD 21218-2694, USA.
CONTRACT NUMBER: HL58564 (NHLBI)
SOURCE: BLOOD, (2000 Sep 1) 96 (5) 1789-97.
Journal code: A8G; 7603509. ISSN: 0006-4971.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 200010
ED Entered STN: 20001027
Last Updated on STN: 20001027
Entered Medline: 20001018

AB Accumulating evidence suggests that successful metastatic spread may depend on the ability of **tumor** cells to undergo extensive interactions with platelets. However, the mechanisms mediating **tumor** cell adhesion to platelets under conditions of flow remain largely unknown. Therefore, this study was designed to analyze the ability. . . also convert instantaneously transient tethers initiated by P-selectin into stable adhesion. This step is at least partially mediated by von **Willebrand** factor, but not fibrinogen or fibronectin, that bridges platelet alpha(IIb)beta(3) with a yet unidentified receptor on the LS174T cell surface. . . adhesive interactions under static conditions. This cascade of events depicts an efficacious process for colon carcinoma arrest at sites of **vascular** injury. (Blood. 2000;96:1789-1797)

L9 ANSWER 13 OF 215 MEDLINE DUPLICATE 11
ACCESSION NUMBER: 2000400097 MEDLINE
DOCUMENT NUMBER: 20383186 PubMed ID: 10928051
TITLE: Expression of focal adhesion kinase (p125 FAK) and proline-rich tyrosine kinase 2 (PYK2/CAKb) in cerebral metastases, correlation with VEGF-R-, ecNOS III-labelling and morphometric data.

AUTHOR: Ludwig H C; Akhavan-Shigari R; Rausch S; Schallock K; Quentin C; Bockermann V; Kolenda H
CORPORATE SOURCE: Georg-August-Universitat, Gottingen, Germany.. hludwig@gwdg.de
SOURCE: ANTICANCER RESEARCH, (2000 May-Jun) 20 (3A) 1419-24. Journal code: 59L; 8102988. ISSN: 0250-7005.
PUB. COUNTRY: Greece
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200008
ED Entered STN: 20000824
Last Updated on STN: 20001019
Entered Medline: 20000817

AB . . . have a typical spherical morphology with a common central necrosis and perifocal oedema. It has been proposed that oedema extension, **tumour** volumes and infiltrative behaviour are partially mediated by **vascular** endothelial growth factor (VEGF) and nitric oxide (NO). In several systemic **tumour** entities NO is suggested as a factor which influences the metastatic potential. VEGF has recently been reported to influence the. . . PYK2/CAK beta, VEGF-receptor FLT-1, NOS isozymes NOS I-III, capillary density and the histology in 130 specimens of resected cerebral metastatic **tumours**. A further analysis was performed to morphometrically evaluate **tumour** and oedema volumes and to correlate the immunohistochemical data in a subgroup of 40 patients. MATERIALS AND METHODS: Cryosections (N. . . immunohistologically using a 4-step scoring evaluation for the expression of NOS I-III, VEGF-receptor FLT-1, and capillary vessel presence by endothelial Von-**Willebrand**-Factor (**VWF**) staining. **Tumour** and oedema extension was measured in preoperative MRI (N = 40) scans by an image-processing device (Kontron) and the ratios of oedema volumes to total **tumour** volumes were calculated. The data were analysed statistically (Spearman rank order correlation and Kruskal-Wallis ANOVA) and correlated with the clinical. . . FAK and NOS III (Spearman p = 0.008) and FAK and VEGF-R (p = 0.03). The morphometric evaluation resulted in **tumour** volumes between 2.0 and 83 cm3 (mean 22.5 +/- 19.1 SD) with oedema ratios between 0 and 100% (mean 62.2 +/- 22.5 SD). FAK expression correlated significantly (p = 0.06) with **tumour** volumes and histology. CONCLUSION: The frequent histotypic occurrence of FAK and PYK2 in metastases could be an important factor in. . .

L9 ANSWER 14 OF 215 MEDLINE DUPLICATE 12
ACCESSION NUMBER: 2000438472 MEDLINE
DOCUMENT NUMBER: 20404019 PubMed ID: 10944555
TITLE: Serum soluble vascular cell adhesion molecule-1: role as a surrogate marker of angiogenesis.
AUTHOR: Byrne G J; Ghellal A; Iddon J; Blann A D; Venizelos V; Kumar S; Howell A; Bundred N J
CORPORATE SOURCE: Department of Academic Surgery, University Hospital of South Manchester, U.K.
SOURCE: JOURNAL OF THE NATIONAL CANCER INSTITUTE, (2000 Aug 16) 92 (16) 1329-36. Journal code: J9J; 7503089. ISSN: 0027-8874.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200009
ED Entered STN: 20000928
Last Updated on STN: 20000928
Entered Medline: 20000920

AB BACKGROUND: Angiogenesis, the development of new blood vessels from pre-existing **vasculature**, is a prerequisite for **tumor** growth and metastasis. Surrogate markers for angiogenesis would be useful for studying the effectiveness of antiangiogenesis drugs. We examined the potential of three serum glycoproteins-**vascular** cell adhesion molecule-1 (VCAM-1), endothelial selectin (E-selectin), and von **Willebrand** factor (**VWF**)-to serve as markers for angiogenesis. METHODS: Preoperative serum levels of VCAM-1, E-selectin, and **VWF** were measured by enzyme-linked immunosorbent assay in 93 women with early breast **cancer** and were compared with microvessel density in each **tumor**, histologic features, and recurrence after surgery. Serum samples were taken from 55 women with advanced breast **cancer** who were commencing hormonal therapy, both immediately before therapy and 3 months later. Changes in serum levels of VCAM-1, E-selectin, and **VWF** were compared with the response of the disease to hormonal therapy assessed 6 months after the start of hormone therapy or at disease progression. All P: values are two-sided. RESULTS: In women with early breast **cancer**, serum levels of VCAM-1 (but not of E-selectin or **VWF**) correlated closely with microvessel density in **tumors** (r =.65; P:<.001), and women who developed early recurrence had higher preoperative levels of serum VCAM-1 than those who remained disease free (P: =.01). Serum VCAM-1 levels rose in women with advanced breast **cancer** whose disease progressed (P:<.001) but remained unchanged or fell in women with advanced breast **cancer** whose disease remained stable or showed a partial response to hormonal therapy. CONCLUSION: Serum VCAM-1 appears to be a surrogate marker of angiogenesis in breast **cancer**. Its measurement may, therefore, help in the assessment of antiangiogenesis drugs currently in phase II trials.

L9 ANSWER 15 OF 215 MEDLINE DUPLICATE 13
ACCESSION NUMBER: 2000269364 MEDLINE
DOCUMENT NUMBER: 20269364 PubMed ID: 10811227
TITLE: Molecular engineering of matrix-targeted retroviral vectors incorporating a surveillance function inherent in von Willebrand factor.
AUTHOR: Hall F L; Liu L; Zhu N L; Stapfer M; Anderson W F; Beart R W; Gordon E M
CORPORATE SOURCE: Department of Colorectal Surgery, Keck School of Medicine of the University of Southern California, Los Angeles 90089, USA.
SOURCE: HUMAN GENE THERAPY, (2000 May 1) 11 (7) 983-93. Journal code: A12; 9008950. ISSN: 1043-0342.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200007
ED Entered STN: 20000810
Last Updated on STN: 20000810
Entered Medline: 20000727

AB . . . inefficiency of gene delivery to appropriate sites in vivo.

Previous studies demonstrated that the physiological surveillance function performed by von Willebrand factor (vWF) could be incorporated into retroviral vectors by molecular engineering of the MuLV ecotropic envelope (Env) protein. To advance the application of vWF targeting technology beyond laboratory animals, we prepared an extensive series of Env proteins bearing modified vWF-derived matrix-binding sequences and assembled these chimeric proteins into targeted vectors that are capable of transducing human cells. Initially, a dual. . . Subsequently, streamlined "escort" Env proteins were constructed wherein the inoperative receptor-binding domain of the targeting partner was replaced by the vWF-derived collagen-binding motif. Ultimately, an optimal construct was developed that exhibited properties of both extracellular matrix (ECM)-targeting and near wild-type amphotropic. . . enhanced focal transduction of neointimal cells (approximately 20%) was demonstrated in a rat model of balloon angioplasty. Moreover, transduction of tumor foci (approximately 1-3%) was detected after portal vein infusion of a matrix-targeted vector in a nude mouse model of liver. . . properties of these targeted injectable retroviral vectors would be suitable for improving therapeutic gene delivery in numerous clinical applications, including vascular restenosis, laser and other surgical procedures, orthopedic injuries, wound healing, ischemia, arthritis, inflammatory disease, and metastatic cancer.

L9 ANSWER 16 OF 215 MEDLINE DUPLICATE 14
ACCESSION NUMBER: 2000462381 MEDLINE
DOCUMENT NUMBER: 20466360 PubMed ID: 11014432
TITLE: Vascular endothelial growth factor-driven glioma growth and vascularization in an orthotopic rat model monitored by magnetic resonance imaging.
AUTHOR: Goldbrunner R H; Bendszus M; Sasaki M; Kraemer T; Plate K H; Roosen K; Tonn J C
CORPORATE SOURCE: Department of Neurosurgery, University of Wurzburg, Germany.. goldbrunner@mail.uni-wuerzburg.de
SOURCE: NEUROSURGERY, (2000 Oct) 47 (4) 921-9; discussion 929-30. Journal code: NZL. ISSN: 0148-396X.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200101
ED Entered STN: 20010322
Last Updated on STN: 20010322
Entered PubMed: 20010108
Entered Medline: 20010125

AB OBJECTIVE: The goal of the present study was to develop an orthotopic in vivo model for the investigation of vascular endothelial growth factor (VEGF)-dependent glioma growth and vascularization. METHODS: C6 glioma cells were infected with viruses encoding sense or antisense VEGF. Expression of the transgene was controlled by. . . both clones as well as from wild-type and mock-transfected cells were implanted in the brains of Sprague-Dawley rats. Growth and vascularization were assessed using magnetic resonance imaging after 7 and 11 days. Histology was studied using hematoxylin and eosin staining, immunohistochemistry with anti-von Willebrand staining, anti-VEGF, anti-CD8, and assessment of vessel density. RESULTS: Cell proliferation, migration, and invasion in vitro were very similar in. . . clones. Sense gliomas demonstrated by far the fastest growth in vivo, with intense contrast enhancement meeting criteria for highly malignant tumors. Histological examination revealed masses of von Willebrand- and VEGF-positive tumor vessels with a high vessel density. Antisense gliomas depicted the radiological features of low-grade gliomas, with slow growth and poor vascularization, although they were highly infiltrative. Wild-type and mock-transfected gliomas demonstrated similar growth and vascularization patterns intermediate between sense and antisense gliomas. Any influence of the allogeneic response of the hosts on different tumor sizes could be excluded. CONCLUSION: Our model elucidates glioma growth and vascularization as strongly VEGF dependent, which is consistent with human gliomas. Thus, this model is suitable for testing antiangiogenic strategies to. . .

L9 ANSWER 17 OF 215 MEDLINE DUPLICATE 15
ACCESSION NUMBER: 2001011702 MEDLINE
DOCUMENT NUMBER: 20449379 PubMed ID: 10992539
TITLE: Malignant vascular tumours of the pleura in "asbestos" workers and endothelial differentiation in malignant mesothelioma.
AUTHOR: Attanoos R L; Suvarna S K; Rhead E; Stephens M; Locke T J; Sheppard M N; Pooley F D; Gibbs A R
CORPORATE SOURCE: Department of Histopathology, Llandough Hospital, Cardiff, UK.
SOURCE: THORAX, (2000 Oct) 55 (10) 860-3. Journal code: VQW. ISSN: 0040-6376.
PUB. COUNTRY: ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200010
ED Entered STN: 20010322
Last Updated on STN: 20010322
Entered Medline: 20001023

AB BACKGROUND: Three cases of diffuse malignant vascular tumours of the pleura are described which mimicked malignant mesothelioma clinically and pathologically (so called "pseudomesothelioma"). All had occupational histories of exposure to asbestos. The relationship of these tumours to mesothelioma and asbestos exposure is discussed. METHODS: To examine the histogenetic relationship between mesothelioma and these three tumours an immunohistochemical analysis of vascular marker (CD31, CD34, and Von Willebrand factor) expression was undertaken in 92 cases of pleural mesothelioma, in addition to these three tumours. Electron microscopic fibre analysis of lung tissue was performed on each of the three cases to assess asbestos fibre content.. . . malignant mesothelioma clinically and pathologically but, of the 92 pleural mesotheliomas tested, none showed expression of CD31, CD34, and Von Willebrand factor. Although all three cases had claimed exposure to asbestos, ferruginous bodies typical of asbestos were only seen by light. . .

L9 ANSWER 18 OF 215 CAPLUS COPYRIGHT 2001 ACS DUPLICATE 16
ACCESSION NUMBER: 2000:894014 CAPLUS
DOCUMENT NUMBER: 134:25206

TITLE: Pentoxifylline prevents upregulation of monocyte tissue factor in renal transplant recipients undergoing post-graft complications
AUTHOR(S): Susen, Sophie; Hazzan, Marc; Labalette, Myriam; Zawadzki, Christophe; Dessaint, Jean Paul; Lelievre, Gaston; Jude, Brigitte; Noel, Christian
CORPORATE SOURCE: Laboratoire d'Hematologie, Centre Hospitalier Regional Universitaire, Lille, 59037, Fr.
SOURCE: Thromb. Haemostasis (2000), 84(5), 764-769
CODEN: THHADQ; ISSN: 0340-6245
PUBLISHER: F. K. Schattauer Verlagsgesellschaft mbH
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 52
REFERENCE(S): (1) Amirkhosravi, A; Thromb Haemost 1998, V80, P598 CAPLUS
(3) Bottles, K; Blood Coag Fibrinol 1993, V4, P405 CAPLUS
(4) Carlsen, E; Clin Exp Immunol 1989, V76, P428 CAPLUS
(5) Carlsen, E; Transplantation 1988, V46, P575 CAPLUS
(10) Deira, J; Am J Kidney Dis 1998, V32, P575 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB Pentoxifylline (PTX) has been demonstrated to improve graft survival in renal transplant recipients undergoing post graft complications. As activated monocytes are possible initiators of vascular damage through tissue factor (TF) expression, we evaluated the monocyte TF expression and endothelium activation markers in 140 consecutive patients receiving cadaveric kidney grafts, randomized in a double-blind study comparing PTX vs. placebo. Monocyte TF expression and plasma von Willebrand factor, tissue plasminogen activator, thrombomodulin and tumor necrosis factor-.alpha. (TNF-.alpha.) levels were detd. before transplantation and each month after. Addnl. samplings were realized in case of acute rejection. TF and TNF-.alpha. expression were significantly modified after graft. In patients with complications, PTX prevented the increase of TF expression at month one, and after rejection episodes. Endothelium activation markers were significantly modified after graft and in patients with complications but PTX had no significant effect on their plasma levels. These results suggest that the protective effect of PTX on graft survival could be related to the prevention of monocyte TF upregulation assocd. with complications.

L9 ANSWER 19 OF 215 MEDLINE DUPLICATE 17
ACCESSION NUMBER: 2001191750 MEDLINE
DOCUMENT NUMBER: 21070121 PubMed ID: 11199455
TITLE: [Coexpression of VEGF and bFGF is associated with increased vascular density in head and neck carcinomas]. Ko-Expression von VEGF und bFGF ist assoziiert mit einer erhohten Gefassdichte in Kopf-Hals-Karzinomen.
AUTHOR: Riedel F; Gotte K; Schwalb J; Bergler W; Hormann K
CORPORATE SOURCE: Universitats-Hals-Nasen-Ohrenklinik Mannheim.. frank.riedel@hno.ma.uni-heidelberg.de
SOURCE: LARYNGO- RHINO- OTOLOGIE, (2000 Dec) 79 (12) 730-5. Journal code: AB7. ISSN: 0935-8943.
PUB. COUNTRY: Germany: Germany, Federal Republic of
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: German
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200104
ED Entered STN: 20010410
Last Updated on STN: 20010410
Entered PubMed: 20010129
Entered Medline: 20010405

AB BACKGROUND: Angiogenesis is crucial for tumor growth and metastasis. In several tumors, microvascular density has been shown to correlate with metastasis and aggressiveness. Vascular endothelial growth factor (VEGF) and basic Fibroblast Growth Factor (bFGF) are known to have potent angiogenic activity. Their expression has. . . immunostained for VEGF and bFGF using a standard streptavidin-biotin complex procedure. To evaluate angiogenesis, endothelial cells were stained immunohistochemically using anti-vWF polyclonal antibody. Microvessels were quantified by counting vessels in a x200 field in the most vascular area of the tumor. RESULTS: 25/51 (49%) of the investigated carcinomas showed co-expression of both factors (VEGF+/bFGF+), while 6/51 (11.7%) carcinomas only expressed VEGF and 13/51 (25.5%) carcinomas expressed bFGF. 7/51 (13.7%) tumors showed no expression of these factors (VEGF-/bFGF-). Carcinomas with a co-expression of VEGF and bFGF showed a significantly increased mean microvessel density (88.3 +/- 24.4) compared to tumors expressing only VEGF (77 +/- 16.8) or bFGF (71.1 +/- 15.8) ($p = 0.022$) or tumors with no expression of both factors (51.1 +/- 13.4) ($p < 0.001$). The association of VEGF and bFGF expression level. . . correlation of the co-expression of angiogenic VEGF and bFGF with increased microvessel density underlines the importance of both factors for tumor angiogenesis in HNSCC. VEGF and bFGF might act cooperatively in the process of neovascularization in human head and neck cancer.

L9 ANSWER 20 OF 215 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2000:575155 CAPLUS
DOCUMENT NUMBER: 134:84200
TITLE: Phenotypic and functional characteristics of tumour-derived microvascular endothelial cells
AUTHOR(S): Alessandri, Giulio; Chirivi, Renato G. S.; Fiorentini, Simona; Dossi, Romina; Bonardelli, Stefano; Giulini, Stefano Maria; Zanetta, Gerardo; Landoni, Fabio; Graziotti, Pier Paolo; Turano, Adolfo; Caruso, Arnoldo; Zardi, Luciano; Giavazzi, Raffaella; Bani, Maria Rosa
CORPORATE SOURCE: Institute of Microbiology, University of Brescia, Italy
SOURCE: Clin. Exp. Metastasis (2000), Volume Date 1999, 17(8), 655-662
CODEN: CEXMD2; ISSN: 0262-0898
PUBLISHER: Kluwer Academic Publishers
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 41
REFERENCE(S): (2) Arenberg, D; J Clin Invest 1996, V97, P2792 CAPLUS
(3) Borsi, L; Exp Cell Res 1992, V199, P98 CAPLUS
(4) Brooks, P; Science 1994, V264, P569 CAPLUS
(7) Cheng, S; Proc Natl Acad Sci 1997, V94, P12081 CAPLUS
(8) Chirivi, R; Int J Cancer 1996, V67, P856 CAPLUS

AB The authors recently developed a method for the isolation and purifn. of tumor-derived endothelium. In this study the phenotypic and functional properties of human tumor-derived microvascular endothelial cells (TdMEC) were examd. Endothelium obtained from human adrenal gland specimens (HAMEC) was used as a ref. microvascular endothelial cell population. TdMEC formed a confluent monolayer with the typical morphol. appearance of endothelium and were pos. for endothelial markers such as Ulex-1 lectin, CD31 antigen, von Willebrand Factor and VE-cadherin. The addn. of acidic fibroblast growth factor (aFGF), basic FGF (bFGF) or vascular endothelial growth factor (VEGF) substantially improved proliferation of TdMEC; and kidney carcinoma derived endothelial cells were more responsive to FGFs, whereas glioblastoma derived endothelial cells greatly responded to VEGF. TdMEC expressed high levels of the VEGF receptors, KDR/flk-1 and Flt-1, as shown by northern blot anal. TdMEC expressed the adhesion mols. ICAM-1, VCAM-1 and E-selectin that could be further increased by exposing TdMEC culture to interleukin-1. All the TdMEC expressed interleukin-8 mRNA. These findings show that TdMEC in vitro maintain several of the features described for microvasculature. Thus, TdMEC represent a useful tool to study markers for tumor vasculature.

L9 ANSWER 21 OF 215 MEDLINE DUPLICATE 18
ACCESSION NUMBER: 2000208960 MEDLINE
DOCUMENT NUMBER: 20208960 PubMed ID: 10738124
TITLE: Vascular endothelial growth factor expression and neovascularisation in non-small cell lung cancer.
AUTHOR: Yano T; Tanikawa S; Fujie T; Masutani M; Horie T
CORPORATE SOURCE: 1st Department of Internal Medicine, Nihon University School of Medicine, 30-1 Oyaguchi-Kamimachi, Itabashi-Ku, Tokyo, Japan.. hc4t-yn@ashai-net.or.jp
SOURCE: EUROPEAN JOURNAL OF CANCER, (2000 Mar) 36 (5) 601-9. Journal code: ARV; 9005373. ISSN: 0959-8049.
PUB. COUNTRY: ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200006
ED Entered STN: 20000616
Last Updated on STN: 20000616
Entered Medline: 20000606

AB Many recent studies have demonstrated that tumour angiogenesis is a potent prognostic factor for various malignant tumours, but this has not been clearly shown in non-small cell lung carcinoma (NSCLC). The purpose of this study was to. . . MVD associated with VEGF in patients with NSCLC by comparing the immunohistochemical results obtained for CD34 with those obtained for vWf. Microvessel density (MVD) and the expression of vascular endothelial growth factor (VEGF) were investigated in 108 cases of NSCLC by immunohistochemistry. The correlation between von Willebrand factor (vWf) and CD34 staining for MVD was not strong, and vWf staining did not correlate with VEGF expression, but CD34 staining did. Staining for CD34 significantly correlated with survival in adenocarcinoma, distant metastasis and postoperative recurrence, but staining for vWf did not. CD34 was more sensitive and specific than vWf for staining endothelial cells associated with VEGF expression. It is suggested that research on neovascularisation should be investigated on every. . . should focus on the early stages of NSCLC which are not under the influence of a variety of complications facilitating tumour neovascularisation.

L9 ANSWER 22 OF 215 MEDLINE DUPLICATE 19
ACCESSION NUMBER: 2000236637 MEDLINE
DOCUMENT NUMBER: 20236637 PubMed ID: 10776879
TITLE: Do angiogenesis and growth factor expression predict prognosis of esophageal cancer?.
AUTHOR: Millikan K W; Mall J W; Myers J A; Hollinger E F; Doolas A; Saclarides T J
CORPORATE SOURCE: Department of General Surgery, Rush-Presbyterian-St. Luke's Medical Center, Chicago, Illinois, USA.
SOURCE: AMERICAN SURGEON, (2000 Apr) 66 (4) 401-5; discussion 405-6.
Journal code: 43E; 0370522. ISSN: 0003-1348.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200005
ED Entered STN: 20000512
Last Updated on STN: 20000512
Entered Medline: 20000504

AB A retrospective study of surgically resectable esophageal cancers was undertaken to determine the relationship between angiogenesis score and growth factor expression with tumor size, histology, degree of differentiation, depth of invasion, nodal disease, and the presence of Barrett's esophagus. The office and hospital. . . resection for carcinoma between 1990 and 1995 at Rush-Presbyterian-St. Luke's Medical Center were reviewed. Data collection included patient demographics, survival, tumor size, histology, differentiation, depth of invasion, nodal metastases, and the presence of Barrett's esophagus. The pathology specimens were immunostained for von Willebrand factor (factor VIII-related antigen). Immunostaining was also performed for vascular endothelial growth factor and transforming growth factor alpha. Twenty normal esophageal specimens served as controls. Angiogenesis score was determined by. . . under conventional light microscopy at x200 magnification, and growth factor expression was graded on a scale of 1 to 4. Cancers had higher angiogenesis and growth factor expression than controls (P = 0.01). Patient age, tumor size, histology, differentiation, depth of invasion, and Barrett's esophagus did not correlate with angiogenesis score or tumor growth factor expression. Lymph node status did correlate with both angiogenesis score and growth factor expression (P < or =. . .

L9 ANSWER 23 OF 215 MEDLINE DUPLICATE 20
ACCESSION NUMBER: 2000429614 MEDLINE
DOCUMENT NUMBER: 20379088 PubMed ID: 10918211
TITLE: Apoptosis, proliferation, and angiogenesis in oral tissues. Possible relevance to tumour progression.
AUTHOR: Macluskey M; Chandrachud L M; Pazouki S; Green M; Chisholm D M; Ogden G R; Schor S L; Schor A M
CORPORATE SOURCE: The Oral Diseases Group, Dundee Dental Hospital, University of Dundee, Dundee, DD1 4HR, UK.
SOURCE: JOURNAL OF PATHOLOGY, (2000 Aug) 191 (4) 368-75.

Journal code: JLB; 0204634. ISSN: 0022-3417.
PUB. COUNTRY: ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200009
ED Entered STN: 20000922
Last Updated on STN: 20000922
Entered Medline: 20000912

AB Experimental animal models have demonstrated that angiogenesis is essential for **tumour** progression, whilst sustained **tumour** growth requires a positive balance between **tumour** cell proliferation and cell death (apoptosis). The aim of this study was to determine the relative contribution of apoptosis, proliferation,. . . cells were visualized by in-situ end-labelling of DNA, proliferative cells by staining with Ki-67 antibody, and blood vessels with von **Willebrand** factor (vWF) antibody. One-way analysis of variance showed that indices of apoptosis (AI), proliferation (PI), and angiogenesis (**vascularity**) increased significantly with disease progression from normal oral mucosa, through dysplasia, to carcinoma ($p<0.0001$ for every index). The increase from normal mucosa to moderate dysplasia was significant for PI and **vascularity**, but not for AI. In contrast, the increase from dysplasia to carcinoma was significant for AI and **vascularity**, but not for PI. These data suggest that disease progression in the oral mucosa is accompanied by angiogenesis and increases. . .

L9 ANSWER 24 OF 215 MEDLINE DUPLICATE 21
ACCESSION NUMBER: 2000108742 MEDLINE
DOCUMENT NUMBER: 20108742 PubMed ID: 10640966
TITLE: Derivation of a new hematopoietic cell line with endothelial features from a patient with transformed myeloproliferative syndrome: a case report.
COMMENT: Comment in: Cancer. 2000 Jul 1;89(1):221-3
AUTHOR: Fiedler W; Henke R P; Ergun S; Schumacher U; Gehling U M; Vohwinkel G; Kilic N; Hossfeld D K
CORPORATE SOURCE: Department of Oncology/Hematology, University Hospital Eppendorf, Hamburg, Germany.
SOURCE: CANCER, (2000 Jan 15) 88 (2) 344-51.
Journal code: CLZ; 0374236. ISSN: 0008-543X.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 200002
ED Entered STN: 20000229
Last Updated on STN: 20000928
Entered Medline: 20000216

AB . . . included skin and lymph node infiltrations that were taken for an angiosarcoma due to positivity for CD34, CD31, and von **Willebrand** factor on immunohistology. In addition to hematopoietic markers, leukemic cells expressed endothelial antigens such as CD62E, CD105, and bound Ulex europaeus lectin-1. Immunocytochemistry revealed positive staining for **vascular** endothelial growth factor receptor type 2 (KDR), Tie-2/Tek, the angiopoietin receptor, and **vascular** endothelial cadherin. These results were confirmed by PCR analysis. Simultaneous staining for CD62E and FISH analysis showed that cells with. . . this manifestation as part of the leukemic process. The derived cell line, UKE-1, forms colonies in soft agar and is **tumorigenic** in SCID mice. CONCLUSIONS: This new cell line, UKE-1, appears to combine hematopoietic and endothelial features, indicating the close ontogenic. .

L9 ANSWER 25 OF 215 MEDLINE DUPLICATE 22
ACCESSION NUMBER: 2001138908 MEDLINE
DOCUMENT NUMBER: 21030827 PubMed ID: 11192830
TITLE: Surrogate markers of tumoral angiogenesis.
AUTHOR: Byrne G J; Bundred N J
CORPORATE SOURCE: Department of Surgery, University Hospital of South Manchester, UK.
SOURCE: INTERNATIONAL JOURNAL OF BIOLOGICAL MARKERS, (2000 Oct-Dec) 15 (4) 334-9.
Journal code: IJM. ISSN: 0393-6155.
PUB. COUNTRY: Italy
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200103
ED Entered STN: 20010404
Last Updated on STN: 20010404
Entered PubMed: 20010115
Entered Medline: 20010308

AB BACKGROUND: Angiogenesis is a prerequisite for **tumor** growth and metastasis. **Vascular** cell adhesion molecule1 (VCAM-1) is expressed on endothelial cells as a result of **vascular** endothelial growth factor (VEGF) stimulation. PURPOSE: To determine if measurement in serum of VEGF or VCAM-1 provides an accurate measure of **tumor** angiogenesis. METHODS: VCAM-1 and VEGF were measured in the serum of women with early and advanced breast **cancer** by ELISA. Levels were compared to levels of VCAM-1 and VEGF in women with normal breasts and levels of the endothelial glycoprotein von **Willebrand** factor. Levels of VEGF and VCAM-1 in women with early breast **cancer** were correlated with established clinicopathological prognostic markers and intratumoral microvessel density (IMD). RESULTS: In early breast **cancer** serum VCAM-1 correlated closely with the microvessel density in **tumors** ($r=0.61$, $p<0.001$). Women with lymph node-positive and high-grade **tumors** had higher levels of serum VCAM-1 than women with lymph node-negative and low-grade **tumors**. Serum VEGF demonstrated no correlation with established prognostic features or IMD. Levels of VCAM-1 and VEGF were raised in women with advanced breast **cancer**. CONCLUSION: Serum VCAM-1 is a surrogate marker of angiogenesis in breast **cancer** and its measurement may help in the assessment of antiangiogenic drugs currently in phase II trials.

L9 ANSWER 26 OF 215 MEDLINE DUPLICATE 23
ACCESSION NUMBER: 2000076272 MEDLINE
DOCUMENT NUMBER: 20076272 PubMed ID: 10607717
TITLE: Evidence of increased angiogenesis in patients with acute myeloid leukemia.
AUTHOR: Hussong J W; Rodgers G M; Shami P J
CORPORATE SOURCE: Department of Pathology, ARUP Laboratories, Salt Lake City, UT, USA.

SOURCE: BLOOD, (2000 Jan 1) 95 (1) 309-13.
Journal code: A8G; 7603509. ISSN: 0006-4971.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 200001
ED Entered STN: 20000209
Last Updated on STN: 20000209
Entered Medline: 20000131

AB Angiogenesis plays a key role in solid tumor growth. The purpose of this work was to study angiogenesis in acute myeloid leukemia (AML). We stained bone marrow samples from 20 adult patients with untreated AML and 20 normal controls using endothelial cell markers (ULEX-E and von Willebrand factor (vWF)). The number of vessels per millimeter length of bone marrow core biopsy specimen was scored by light microscopy. Using ULEX-E. . . 3.6 vessels/mm (range, 3.7-19.3), whereas normal marrows had 4.3 +/- 1.8 vessels/mm (range, 1.6-7.9). A similar difference was noted using vWF staining (8.6 +/- 3.0 vessels/mm vs 4. 9 +/- 2.2 vessels/mm in AML vs normal bone marrows, respectively). The differences between the numbers of vessels/mm in AML and normal marrows were highly significant (P <.0001 for both ULEX-E and vWF staining). When analyzed by FAB category, there was no difference in the average number of vessels/mm among the different subgroups. . . and U937 human AML cell lines and 4 of 4 freshly isolated AML cells from untreated patients expressed mRNA for vascular endothelial growth factor (VEGF). Both cell lines as well as all fresh AML isolates tested expressed VEGF protein. Basic fibroblast. . .

L9 ANSWER 27 OF 215 MEDLINE DUPLICATE 24
ACCESSION NUMBER: 2000232505 MEDLINE
DOCUMENT NUMBER: 20232505 PubMed ID: 10769672
TITLE: Oedema extension in cerebral metastasis and correlation with the expression of nitric oxide synthase isozymes (NOS I-III).
AUTHOR: Ludwig H C; Ahkavan-Shigari R; Rausch S; Schallock K; Quentin C; Ziegler D; Bockermann V; Markakis E
CORPORATE SOURCE: Georg-August-Universitat, Gottingen, Germany.. hludwig@gwdg.de
SOURCE: ANTICANCER RESEARCH, (2000 Jan-Feb) 20 (1A) 305-10.
Journal code: 59L; 8102988. ISSN: 0250-7005.
PUB. COUNTRY: Greece
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200005
ED Entered STN: 20000518
Last Updated on STN: 20000518
Entered Medline: 20000511

AB . . . a peritumoral oedema is a common radiological sign in preoperative CT- and MRI scans of patients with cerebral metastasis. Large tumours can be accompanied by a marginally extended oedema and vice versa. Several cytokines (VEGF) have been identified as mediators of vascular induction and permeability. Transmitters such as nitric oxide (NO) have been identified as specific mediators of vascular dilation and tumour blood flow in primary brain tumours in which different NOS isozymes (NOS I and III) are induced as a result of the latent hypoxic metabolic scenery.. . . authors have considered NO as an endothelial stabilising metabolite. Inducible NOS II is expressed by microglia and macrophages invading during tumour growth. At present, no data exist on NO synthesising enzymes in cerebral metastasis. MATERIALS AND PATIENTS: Cryosections (N = 96). . . grading evaluation for the expression of NOS I-III, VEGF-receptor FLT-1, a pan-macrophage marker Ki-M1P, and capillary vessel presence by endothelial Von-Willebrand-Factor staining. The tumour and oedema extension was measured in preoperative MRI scans by an image processing device (Kontron) and calculated for the ratios of oedema volumes to total tumour volumes. The data were analysed statistically (Pearson Chi2 and Kruskal-Wallis analysis of variances) and correlated with the clinical data. Inducible. . . 289 patients in our department suffered from a metastatic disease in the brain or spinal cord. In 96 cases resected tumour material was processed for the immunohistological investigation. The age distribution ranged from 14 to 85 years with a median age. . . Ki-M1P was observed in 72% of all cases. Fifty seven percent of the specimens exhibited strong labelling with antibodies against VWF. Coexpressions were statistically significant for the VEGF receptor and NOS I-III ($p < 0.01$), Ki-M1P and NOS I and II. . . III ($r = -0.44$, $p = 0.13$) and VEGF-R ($r = -0.42$, $p = 0.022$). No correlation existed for Ki-M1P, VWF and NOS I. CONCLUSIONS: The objective of the study was to investigate oedema morphometry, expression of NOS I-III and VEGF-R,. . .

L9 ANSWER 28 OF 215 MEDLINE DUPLICATE 25
ACCESSION NUMBER: 2000232504 MEDLINE
DOCUMENT NUMBER: 20232504 PubMed ID: 10769671
TITLE: Expression of nitric oxide synthase isozymes (NOS I-III) by immunohistochemistry and DNA in situ hybridization. Correlation with macrophage presence, vascular endothelial growth factor (VEGF) and oedema volumetric data in 220 glioblastomas.
AUTHOR: Ludwig H C; Feiz-Erfan I; Bockermann V; Behnke-Mursch J; Schallock K; Markakis E
CORPORATE SOURCE: Georg-August-Universitat, Gottingen, Germany.. hludwig@gwdg.de
SOURCE: ANTICANCER RESEARCH, (2000 Jan-Feb) 20 (1A) 299-304.
Journal code: 59L; 8102988. ISSN: 0250-7005.
PUB. COUNTRY: Greece
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200005
ED Entered STN: 20000518
Last Updated on STN: 20000518
Entered Medline: 20000511

AB . . . arginine by three different isozymes of nitric oxide synthase (NOS I-III). NO has been identified as a powerful metabolite of vascular smooth muscle cell function, cerebral blood circulation and oedema induction. NOS induction by different cytokines has been shown previously in glioblastoma cell cultures and NOS III expression due to astrocytoma grading has been shown in several tumors recently. The aim of the present study was to study the coexpression of NOS I-III, macrophage and capillary presence with. . . expression (4-grade values, blinded assay by two observers) of NOS I-III together with those of VEGF,

VEGF- R (Flt-1), EGF-R1, von-Willebrand-factor (vWF) and a pan-macrophage marker (Ki-M1P) immunohistochemically in tumor specimens from 220 patients and performed tumor volume morphometry by image analysis in a subgroup of 32 cases to test for any correlation with the peritumoral oedema. . .

L9 ANSWER 29 OF 215 MEDLINE DUPLICATE 26
ACCESSION NUMBER: 2001029449 MEDLINE
DOCUMENT NUMBER: 20385503 PubMed ID: 10929208
TITLE: Endothelial-like cells derived from human CD14 positive monocytes.
AUTHOR: Fernandez Pujol B; Lucibello F C; Gehling U M; Lindemann K; Weidner N; Zuzarte M L; Adamkiewicz J; Elsasser H P; Muller R; Havemann K
CORPORATE SOURCE: Institute for Molecular Biology and Tumor Research (IMT), Philipps-University, Marburg, Germany.
SOURCE: DIFFERENTIATION, (2000 May) 65 (5) 287-300.
Journal code: E99. ISSN: 0301-4681.
PUB. COUNTRY: GERMANY: Germany, Federal Republic of
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200011
ED Entered STN: 20010322
Last Updated on STN: 20010322
Entered PubMed: 20001108
Entered Medline: 20001121
AB . . . with eccentric nuclei. After 1 week in culture the cells showed a clear expression of endothelial cell markers, including von Willebrand factor (vWF), CD144 (VE-cadherin), CD105 (endoglin), acetylated low-density lipoprotein (AC-LDL)-receptor, CD36 (thrombospondin receptor), FLT-1, which is vascular endothelial cell growth factor (VEGF) receptor-1, and, to a weaker extent, KDR (VEGF receptor-2). Furthermore, in these cells structures resembling. . . by electron microscopy, and upon culturing on three-dimensional fibrin gels the cells build network-like structures. In addition, cell proliferation and vWF expression was stimulated by VEGF, and the endothelial cell adhesion molecules CD54 (ICAM-1), and CD106 (VCAM-1) became transiently inducible by tumor necrosis factor-alpha (TNF-alpha). In contrast, the dendritic markers CD1a, and CD83 were not expressed to any significant extent. The expression. . .

L9 ANSWER 30 OF 215 MEDLINE DUPLICATE 27
ACCESSION NUMBER: 2001059786 MEDLINE
DOCUMENT NUMBER: 20536800 PubMed ID: 11082402
TITLE: Selective estrogen receptor modulator idoxifene inhibits smooth muscle cell proliferation, enhances reendothelialization, and inhibits neointimal formation in vivo after vascular injury.
AUTHOR: Yue T L; Vickery-Clark L; Louden C S; Gu J L; Ma X L; Narayanan P K; Li X; Chen J; Storer B; Willette R; Gossett K A; Ohlstein E H
CORPORATE SOURCE: Department of Cardiovascular Pharmacology, SmithKline Beecham Pharmaceuticals, King of Prussia, PA, USA.. Tian-Li_Yue@sbphrd.com
SOURCE: Circulation, (2000 Nov 7) 102 (19 Suppl 3) III281-8.
Journal code: DCV. ISSN: 1524-4539.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200012
ED Entered STN: 20010322
Last Updated on STN: 20010322
Entered PubMed: 20001122
Entered Medline: 20001228
AB . . . bone and lipid metabolism while having negligible ER activity on the reproductive system. It is unknown whether ID retains the vascular protective effects of estrogen. METHODS AND RESULTS: In cultured vascular smooth muscle cells (VSMCs), ID inhibited platelet-derived growth factor-induced DNA synthesis and mitogenesis with IC(50) values of 20.4 and 27.5. . . ID resulted in S-phase cell cycle arrest in serum-stimulated VSMCs. ID 1 to 100 nmol/L significantly protected endothelial cells from tumor necrosis factor-alpha (TNF-alpha)-induced apoptosis in vitro. Virgin Sprague-Dawley rats ovariectomized 1 week before the study were treated with ID (1. . . ID significantly enhanced reendothelialization in the injured carotid arteries as determined by Evans blue stain and immunohistochemical analysis for von Willebrand factor. In the former assay, the reendothelialized area in injured vessels was 43% in ID-treated group versus 24% in the vehicle group (P:<0.05); in the latter assay, the numbers of von Willebrand factor-positive cells per cross section increased from 24. 8 (vehicle) to 60.5 (ID) (P:<0.01) at day 14 after injury. In. . . 40%, respectively (P:<0.01), at day 14 after balloon angioplasty. CONCLUSIONS: The results indicate that ID beneficially modulates the balloon denudation-induced vascular injury response. Inhibition of VSMC proliferation and acceleration of endothelial recovery likely mediate this protective effect of ID.

L9 ANSWER 31 OF 215 MEDLINE DUPLICATE 28
ACCESSION NUMBER: 2000094809 MEDLINE
DOCUMENT NUMBER: 20094809 PubMed ID: 10629090
TITLE: Expression of Von Willebrand factor, an endothelial cell marker, is up-regulated by angiogenesis factors: a potential method for objective assessment of tumor angiogenesis.
AUTHOR: Zanetta L; Marcus S G; Vasile J; Dobryansky M; Cohen H; Eng K; Shamamian P; Mignatti P
CORPORATE SOURCE: Department of Surgery, S.A. Localio Laboratory for General Surgery Research, New York University School of Medicine, New York, NY 10016, USA.
SOURCE: INTERNATIONAL JOURNAL OF CANCER, (2000 Jan 15) 85 (2) 281-8.
Journal code: GQU; 0042124. ISSN: 0020-7136.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200002
ED Entered STN: 20000209
Last Updated on STN: 20000209
Entered Medline: 20000201
AB von Willebrand factor (vWF), a glycoprotein produced

uniquely by endothelial cells and megakaryocytes, is routinely used to identify vessels in tissue sections. Vessel density in tumor specimens, as determined by immuno-histochemical staining for vWF or other endothelial cell markers, is a negative prognostic factor for many solid tumors. vWF is heterogeneously distributed throughout the vasculature, transcriptional control in response to the tissue microenvironment being responsible for local variations in endothelial cell levels of vWF. Here, we report that fibroblast growth factor-2 and vascular endothelial growth factor, potent angiogenesis inducers expressed in a variety of tumors, up-regulate expression of vWF mRNA and protein in cultured endothelial cells with a synergistic effect. Our data support the measurement of vWF mRNA in tumors to detect activated endothelium or angiogenesis. For this purpose, we developed a semi-quantitative RT-PCR for vWF mRNA. Preliminary results obtained with specimens from colon carcinoma and the corresponding normal colonic mucosa showed higher vWF mRNA levels in most tumors than in their normal counterparts. The differences in vWF mRNA levels were much larger than the differences in vessel counts between a tumor and the corresponding normal mucosa, indicating that high vWF mRNA levels in tumors may indeed be an early sign of activation of the endothelium. The rapidity, objectivity, sensitivity and specificity of this technique make it suitable for routine clinical application to identify aggressive, highly angiogenic tumors.


L9 ANSWER 32 OF 215 CAPLUS COPYRIGHT 2001 ACS DUPLICATE 29
ACCESSION NUMBER: 2000:636973 CAPLUS
DOCUMENT NUMBER: 134:205711
TITLE: Clinical and prognostic significance of PCNA expression and tumor interstitial vascular density in transitional cell bladder cancer
AUTHOR(S): Zhao, Zhide; Li, Yulin; Kou, Baijun; Wu, Shan; Han, Yingjie; Lu, Xuejun
CORPORATE SOURCE: China - Japan Union Hospital, Norman Bethune Univ. Med. Sci., Changchun, 130031, Peop. Rep. China
SOURCE: Zhongguo Zhongliu Linchang (2000), 27(4), 271-273
CODEN: ZZLIEP; ISSN: 1000-8179
PUBLISHER: Zhongguo Zhongliu Linchang Bianji Weiyuanhui
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB Objective: To evaluate the clin. and prognostic significance of proliferating cell nuclear antigen (PCNA) expression and tumor interstitial microvessel d. (MVD) in transitional cell bladder cancer. Methods: The expression of PCNA and MVD in 72 cases of transitional cell bladder cancer were detd. with anti-PCNA McAb and anti-VWF by Ag McAb immunohistochem. staining. Results: It was shown that the expression of PCNA in bladder cancer was pos. correlated to tumor interstitial vascular d. These two indexes increased with the escalation of the tumor grade ($P < 0.01$), and were higher in tumor with invasion than not ($P < 0.01$). The PCNA and MVD expression in resurgent tumors were higher than those without ($P < 0.01$). Conclusion: The results suggest that the expression of PCNA is a malignant phenotype in transitional cell bladder cancer and that it is related to the formation of tumor interstitial vascularity. The PCNA expression and MVD measurement is of significance in assessing the prognosis of transitional cell bladder cancer.

L9 ANSWER 33 OF 215 MEDLINE DUPLICATE 30
ACCESSION NUMBER: 2000438552 MEDLINE
DOCUMENT NUMBER: 20377755 PubMed ID: 10917982
TITLE: Early inflammatory response after elective abdominal aortic aneurysm repair: a comparison between endovascular procedure and conventional surgery.
AUTHOR: Galle C; De Maertelaer V; Motte S; Zhou L; Stordeur P; Delville J P; Li R; Ferreira J; Goldman M; Capel P; Wautrecht J C; Pradier O; Dereume J P
CORPORATE SOURCE: Department of Vascular Diseases, Department of Haematology-Immunology, and IRIBHN Statistical Unit, Hopital Erasme, Universite Libre de Bruxelles, Belgium.
SOURCE: JOURNAL OF VASCULAR SURGERY, (2000 Aug) 32 (2) 234-46.
Journal code: KD2; 8407742. ISSN: 0741-5214.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200009
ED Entered STN: 20000928
Last Updated on STN: 20000928
Entered Medline: 20000919
AB . . . lymphocyte and monocyte activation markers and adhesion molecules (flow cytometry), soluble levels of cell adhesion molecules (enzyme-linked immunosorbent assay), cytokine (tumor necrosis factor alpha, interleukin-6, and interleukin-8) release (enzyme-linked immunosorbent assay), and liberation of complement products (nephelometry) were measured. RESULTS: Regarding. . . adhesion molecule-1 ($P = .003$ and $P = .001$); there was no intergroup difference ($P = .193$). All groups demonstrated high soluble von Willebrand factor levels ($P = .018$, $P = .007$, and $P = .027$), there being no differences in the patterns ($P = .772$). Otherwise, soluble vascular cell adhesion molecule-1, soluble E-selectin, and soluble P-selectin did not appear to vary in any group. Regarding cytokine release, although a tendency toward high tumor necrosis factor alpha and interleukin-8 levels was noticed in the EAAA group, global time course effects failed to reach statistical. . .

L9 ANSWER 34 OF 215 MEDLINE DUPLICATE 31
ACCESSION NUMBER: 2000289926 MEDLINE
DOCUMENT NUMBER: 20289926 PubMed ID: 10831080
TITLE: Peripheral endothelial dysfunction in heart transplant recipients: possible role of proinflammatory cytokines.
AUTHOR: Holm T; Aukrust P; Andreassen A K; Ueland T; Brosstad F; Froland S S; Simonsen S; Gullestad L
CORPORATE SOURCE: Department of Cardiology, University of Oslo, Rikshospitalet, Norway.. torbjorn.holm@klinmed.uio.no
SOURCE: CLINICAL TRANSPLANTATION, (2000 Jun) 14 (3) 218-25.
Journal code: BB5; 8710240. ISSN: 0902-0063.
PUB. COUNTRY: Denmark
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals

ENTRY MONTH: 200007
ED Entered STN: 20000728
Last Updated on STN: 20000728
Entered Medline: 20000720

AB . . . controls. Ten HTx rec were also followed prospectively with three repeated measurements during the first year after Tx. Plasma von **Willebrand** factor, big-endothelin (b-ET), and proinflammatory cytokines were measured by enzyme immunoassays. **Vascular** responses to both Ach and SNP were significantly attenuated in the HTx rec compared with controls. In longitudinal testing, there. . . a significant reduction in endothelium-dependent vasodilation, but not independent vasodilation from 1 to 12 months after Tx. Plasma levels of **vWF** and b-ET, as well as levels of proinflammatory cytokines, **tumor** necrosis factor (TNF)-alpha, interleukin (IL)-6 and IL-1beta, were all markedly increased in HTx rec. HTx rec responses to Ach were. . .

L9 ANSWER 35 OF 215 MEDLINE DUPLICATE 32
ACCESSION NUMBER: 2000160349 MEDLINE
DOCUMENT NUMBER: 20160349 PubMed ID: 10697276
TITLE: Vascular endothelial growth factor receptor-3 (VEGFR-3): a marker of vascular tumors with presumed lymphatic differentiation, including Kaposi's sarcoma, kaposiform and Dabska-type hemangioendotheliomas, and a subset of angiosarcomas.
AUTHOR: Folpe A L; Veikkola T; Valtola R; Weiss S W
CORPORATE SOURCE: Department of Pathology, Emory University, Atlanta, Georgia, USA.. afolpe@emory.edu
SOURCE: MODERN PATHOLOGY, (2000 Feb) 13 (2) 180-5.
Journal code: PTH; 8806605. ISSN: 0893-3952.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200003
ED Entered STN: 20000330
Last Updated on STN: 20000330
Entered Medline: 20000317

AB Recently, a novel monoclonal antibody to **vascular** endothelial growth factor receptor 3 (VEGFR-3), a tyrosine kinase receptor expressed almost exclusively by lymphatic endothelium in the adult, has. . . cases of Kaposi's sarcoma (KS) and cutaneous lymphangiomas. We sought to extend these studies to a large number of well-characterized **vascular** neoplasms to evaluate diagnostic uses of this antibody and to determine whether it defines them in a thematic fashion. Formalin-fixed, paraffin-embedded sections from 70 **vascular** **tumors** were immunostained with antibodies to VEGFR-3 von **Willebrand** factor (vWF), and CD31. Anti-VEGFR-3 was positive in 23 of 24 KS, 8 of 16 angiosarcomas (AS), 6 of 6 kaposiform hemangioendotheliomas, 4 of 4 Dabska **tumors**, and 2 of 13 hemangiomas. Positively staining angiosarcomas were characterized either by a prominent lymphocytic component, a hobnail endothelial cell similar to that encountered in the Dabska **tumor**, or spindled areas resembling KS. No VEGFR-3 expression was noted in any cases of epithelioid hemangioendothelioma, pyogenic granuloma, littoral angioma, or stasis dermatitis. **vWF** expression was seen in 10 of 13 KS; 13 of 14 AS; 4 of 5 kaposiform hemangioendotheliomas; and all Dabska **tumors**, hemangiomas, lymphangiomas, epithelioid hemangioendotheliomas, **vascular** malformations, stasis dermatitis, and splenic littoral angiomas. CD31 expression was present in 12 of 13 KS, 13 of 14 AS,. . .

L9 ANSWER 36 OF 215 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 2001115635 EMBASE
TITLE: Characterization of endothelial cells isolated by human meningiomas.
AUTHOR: Giordano F.; Mitola S.
CORPORATE SOURCE: F. Giordano, Neurochirurgia Osp. Molinette, Via Cherasco 15, 10126 Torino, Italy
SOURCE: Journal of Neurosurgical Sciences, (2000) 44/4 (177-185).
Refs: 39
ISSN: 0026-4881 CODEN: JNSSBV
COUNTRY: Italy
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 005 General Pathology and Pathological Anatomy
008 Neurology and Neurosurgery
016 Cancer
LANGUAGE: English
SUMMARY LANGUAGE: English

AB . . . some histological subtypes and in some phase of their progression. Angiogenesis is a required event for the progression of solid **tumor**. However there are increasing evidences that the biological features of endothelial cells in the **tumor** other than the microvessel number dictate the behavior of **cancer** disease. In the present study we have tested the hypothesis that in vitro endothelial cells originated by human meningiomas have. . . and established three cell cultures. These cells uptake acetylated LDL and express CD-31, CD-36, nitric oxide synthase type III, von **Willebrand** factor, which are specific markers of endothelial cells. Their mitogenic and motogenic potential in resting conditions or after stimulation with **vascular** endothelial growth factor-A is superimposable to that of normal capillary endothelial cells. However meningioma endothelial cells produce higher amount of. . . chemotactic peptide-1 than control cells. Conclusions. The establishment of a new and suitable technique to isolate endothelial cells from human **cancers** can be useful to learn more on angiogenic mechanisms in **tumor** progression. Furthermore, the data shown underline the possible pathogenic role in meningioma progression of infiltrating macrophages triggered by monocyte chemotactic peptide-1 released by **tumor** endothelial cells.

L9 ANSWER 37 OF 215 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.DUPLICATE 33
ACCESSION NUMBER: 2000275031 EMBASE
TITLE: [Colonic angiodysplasia].
DIE ANGIODYSPLASIE DES KOLONS.
AUTHOR: Zinsser E.
CORPORATE SOURCE: Dr. E. Zinsser, Klinik fur Innere Medizin I, Klin. der Friedrich-Schiller-Univ., Erlanger Allee 101, D-07740 Jena, Germany
SOURCE: Verdauungskrankheiten, (2000) 18/4 (166-168).
Refs: 9
ISSN: 0174-738X CODEN: VERDEJ
COUNTRY: Germany
DOCUMENT TYPE: Journal; General Review
FILE SEGMENT: 036 Health Policy, Economics and Management

048 Gastroenterology
LANGUAGE: German
SUMMARY LANGUAGE: English; German
AB The angiodysplasia of the colon (AD) is an important **vascular** lesion responsible for 3 - 12% of cases of lower gastrointestinal hemorrhage. They are difficult to explain in pathophysiologic terms.. . . in association with several systemic diseases including atherosclerotic cardiovascular disease, aortic stenosis, chronic renal disease, chronic obstructive pulmonary disease, collagen **vascular** disease and v. **Willebrand's** disease. While colonoscopy is probably the most sensitive method for detecting ADs, the true sensitivity and specifity are unknown. Colonoscopy can also detect concomitant pathological lesions capable of bleeding (diverticula, polyps, **cancer**). Angiography should be regarded as a complementary test, when colonoscopic examination is incomplete, or unrevealing. Esophagogastroduodenoscopy and enteroscopy may be. . .

L9 ANSWER 38 OF 215 MEDLINE
ACCESSION NUMBER: 2000177127 MEDLINE
DOCUMENT NUMBER: 20177127 PubMed ID: 10714645
TITLE: Clinical and pathologic features of oligodendrogliomas in two cats.
AUTHOR: Dickinson P J; Keel M K; Higgins R J; Koblik P D; LeCouteur R A; Naydan D K; Bollen A W; Vernau W
CORPORATE SOURCE: Department of Surgery and Radiology, School of Veterinary Medicine, University of California, Davis 95616, USA.
SOURCE: VETERINARY PATHOLOGY, (2000 Mar) 37 (2) 160-7.
Journal code: XBQ; 0312020. ISSN: 0300-9858.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200004
ED Entered STN: 20000413
Last Updated on STN: 20000413
Entered Medline: 20000405
AB . . . were aged neutered males presenting with clinical neurologic deficits suggestive of a brain stem lesion. Magnetic resonance imaging of both **tumors** demonstrated lesions with a pattern of heterogeneous contrast enhancement and multifocal lesions in one cat. Routine cerebrospinal fluid analysis was. . . in the other. Oligodendroglioma cells were seen in cytospin preparations of cerebrospinal fluid from both cats. In each cat, the **tumors** occurred intraventricularly in the midbrain and fourth ventricle with aggressive intraparenchymal infiltration. There was extensive growth into the basilar subarachnoid space of the midbrain and brain stem in one cat. One **tumor** was well differentiated, and the other was an anaplastic subtype. Immunostaining for several myelin- and oligodendroglia-specific antigens was negative with formalin-fixed **tumors** and with unfixed frozen samples from one cat. In both **tumors**, component cells of the intratumoral **vascular** proliferations were positive for human von **Willebrand** factor VIII antigen or smooth muscle actin. Immunocytochemical reactivity for glial fibrillary acidic protein identified both reactive astrocytes and a subpopulation of minigemistocytes in both **tumors**. Ultrastructurally, the **tumor** cells were unremarkable except for their prominent desmosomal junctions and paucity of microtubules.

L9 ANSWER 39 OF 215 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.DUPLICATE 34
ACCESSION NUMBER: 2001045950 EMBASE
TITLE: Cyclin D1, retinoblastoma, p53, and Her2/neu protein expression in preinvasive breast pathologies: Correlation with vascularity.
AUTHOR: Heffelfinger S.C.; Yassin R.; Miller M.A.; Lower E.E.
CORPORATE SOURCE: Dr. S.C. Heffelfinger, Dept. of Pathol. and Lab. Medicine, University of Cincinnati, PO Box 670529, Cincinnati, OH 45267-0529, United States. Sue.heffelfinger@uc.edu
SOURCE: Pathobiology, (2000) 68/3 (129-136).
Refs: 29
ISSN: 1015-2008 CODEN: PATHEF
COUNTRY: Switzerland
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 005 General Pathology and Pathological Anatomy
LANGUAGE: English
SUMMARY LANGUAGE: English
AB Objectives: Preinvasive breast pathologies show a degree of **vascularization** that correlates with risk of invasion. Recently, numerous oncogenes and **tumor** suppressor genes have been shown to regulate neovascularization. Therefore, we examined archival tissues of preinvasive breast pathologies by immunohistochemistry for. . . alterations in the expression of four proteins, cyclin D1, retinoblastoma (Rb), p53, and Her2/neu, known to be important in breast **tumorgenesis**, and correlated these data with tissue **vascularity**. Methods: **Vascularity** was determined by immunologic detection of von **Willebrand** factor. For carcinoma in situ (CIS) both stromal **vascularity** (MVD) and **vascular** cuffing (MCD) were determined. Results: We found that cyclin D1 expression was increased in usual hyperplasia (11% of cases). Atypical. . . identified rarely in atypical hyperplasia and in both noncomedo and comedo ductal CIS. Neither Rb nor Her2/neu expression correlated with **vascularity**. p53 immunoreactivity correlated positively with both MCD and MVD. Cyclin D1 was negatively associated with MVD. Conclusion: These data suggest. . .

L9 ANSWER 40 OF 215 MEDLINE DUPLICATE 35
ACCESSION NUMBER: 2000438930 MEDLINE
DOCUMENT NUMBER: 20304091 PubMed ID: 10847478
TITLE: Growth inhibition of liver metastases by the anti-angiogenic drug TNP-470.
AUTHOR: Gervaz P; Scholl B; Padrun V; Gillet M
CORPORATE SOURCE: Department of Surgical Research, Centre Hospitalier Universitaire Vaudois, Lausanne, Switzerland.
SOURCE: LIVER, (2000 Apr) 20 (2) 108-13.
Journal code: L74; 8200939. ISSN: 0106-9543.
PUB. COUNTRY: Denmark
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200009
ED Entered STN: 20000928
Last Updated on STN: 20000928
Entered Medline: 20000915
AB OBJECTIVE: This study was undertaken in order to assess the efficacy of a

potent angiogenesis inhibitor, TNP-470, on tumor growth in a syngeneic rodent model of liver metastases from colorectal cancer . BACKGROUND: New blood vessel formation is a prerequisite for primary and metastatic tumor growth. TNP-470, a synthetic derivative of fumagillin when subcutaneously transplanted into nude mice, inhibits endothelial cell proliferation and migration, as well as the growth of various human cancers. However, the antitumor effect of this drug has not been studied in models reproducing a natural metastatic environment. Since the liver provides an extensive vascular bed for secondary tumor growth, an anti-angiogenic strategy may therefore be less efficient for treating hepatic metastases than primary tumors. METHODS: 10(7) DHD K12 colon carcinoma cells were injected intrasplenically into syngeneic BD IX rats to produce diffuse liver metastases. TNP-470 (30 mg/kg/day) was administered on alternate days starting 4 days after tumor implantation. The animals were sacrificed after 4 weeks and their livers were processed for histologic examination. In both the treatment and control groups (n=7), tumor volume was determined using a computerized analytical system, and tumor microvessel density was measured by immunostaining with anti-von Willebrand Factor monoclonal antibody. RESULTS: In vitro, TNP-470 demonstrated a direct toxicity towards the DHD K12 cell line with an IC50. . . 0.1 microg/ml. Metastases were present in all animals from both groups. Liver weight (15.2 g vs 11.7 g, p=0.01), and tumor volume (1218 mm3 vs 406 mm3, p=0.03) were significantly reduced in the TNP-470 group compared to the control group. Tumor microvessel density was not statistically different between the two groups (67 vs 63 microvessels/x200 field, p=0.41). CONCLUSION: TNP-470 inhibits the growth of liver metastases in a syngeneic rat model of colorectal cancer. The mechanism responsible for this effect remains unclear, but may involve a combination of anti-angiogenic and direct cytotoxic effects.

L9 ANSWER 41 OF 215 MEDLINE DUPLICATE 36
ACCESSION NUMBER: 2000239467 MEDLINE
DOCUMENT NUMBER: 20239467 PubMed ID: 10779196
TITLE: Vascular endothelial growth factor expression correlates with p53 mutation and angiogenesis in squamous cell carcinoma of the head and neck.
AUTHOR: Riedel F; Gotte K; Schwalb J; Schafer C; Hormann K
CORPORATE SOURCE: Department of Otolaryngology, Head and Neck Surgery, University Hospital Mannheim, Germany.. frank.riedel@hno.ma.uni-heidelberg.de
SOURCE: ACTA OTO-LARYNGOLOGICA, (2000 Jan) 120 (1) 105-11. Journal code: 1HA; 0370354. ISSN: 0001-6489.
PUB. COUNTRY: Norway
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200007
ED Entered STN: 20000720
Last Updated on STN: 20000720
Entered Medline: 20000711

AB Vascular endothelial growth factor (VEGF) has potent angiogenic activity and has been identified in a wide variety of malignancies, including head and neck squamous cell carcinoma (HNSCC). The tumour-suppressor gene p53 has been thought to regulate VEGF. Cryostat sections of 33 head and neck squamous cell carcinomas (HNSCC) were. . . VEGF using a standard streptavidin-biotin complex procedure. To evaluate angiogenesis, microvascular density was counted by staining endothelial cells immunohistochemically using anti-vWF monoclonal antibody. The p53 gene status was analysed using a PCR-SSCP analysis and direct sequencing. VEGF positive staining was detected in 18 (55%) out of 33 tumours. VEGF immunoreactivity did not correlate with the main clinicopathological characteristics of the patients (localization, T-stage, N-status, histological grading). Statistical analysis gave a clear correlation between the tumour vascularity and the VEGF protein expression (p = 0.0036). VEGF negative tumours showed a lower mean number of microvessels per microscopic field (60.3 +/- 15.5) than VEGF positive tumours (79.6 +/- 22.9). P53 mutations were identified in 12 (36.4%) of 33 tumours. The association of p53 mutations and VEGF expression level was significant (0.027). The higher microvessel density in VEGF positive tumours supports the importance of VEGF for tumour angiogenesis in HNSCC. Our results support the hypothesis of a p53 regulation on the angiogenic process through a VEGF up-regulation.

L9 ANSWER 42 OF 215 MEDLINE DUPLICATE 37
ACCESSION NUMBER: 2001029183 MEDLINE
DOCUMENT NUMBER: 20490817 PubMed ID: 11032660
TITLE: Cellular origins of ultraviolet radiation-induced corneal tumours in the grey, short-tailed South American opossum (Monodelphis domestica).
AUTHOR: Kusewitt D F; Hubbard G B; Warbritton A R; McLeskey S W; Miska K B; Henkel R D; Robinson E S
CORPORATE SOURCE: Department of Cell Biology and Physiology, University of New Mexico, Albuquerque, NM 87131-5218, USA.
SOURCE: JOURNAL OF COMPARATIVE PATHOLOGY, (2000 Aug-Oct) 123 (2-3) 88-95. Journal code: HVB. ISSN: 0021-9975.
PUB. COUNTRY: ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200011
ED Entered STN: 20010322
Last Updated on STN: 20010322
Entered PubMed: 20001103
Entered Medline: 20001121

AB Corneal tumours were induced in almost 100% of grey, short-tailed South American opossums (Monodelphis domestica) exposed three times weekly to ultraviolet radiation (UVR) for periods of a year or more. Five tumours, representing the morphological spectrum of UVR-induced corneal tumours (two fibrosarcomas, one malignant fibrous histiocytoma, one putative haemangiosarcoma, and one squamous cell carcinoma overlying a sarcoma), were assayed immunohistochemically. . . vimentin, smooth muscle actin (alpha isoform), muscle-specific actins (alpha and gamma isoforms), desmin and cytokeratin, and with antibodies against the vascular endothelial marker von Willebrand factor. The squamous cell carcinoma was cytokeratin-positive. Other tumours were cytokeratin-negative and vimentin-positive. Three tumours had scattered individual cells and groups of cells immunoreactive with antibodies against smooth muscle actin and

muscle-specific actins; two tumours (a fibrosarcoma and the malignant fibrous histiocytoma) had small numbers of desmin-positive cells. The putative haemangiosarcoma contained two populations of neoplastic cells, von Willebrand factor-positive vascular endothelial cells and smooth muscle actin-positive spindle cells. It was concluded (1) that UVR-induced corneal tumours may be composed of cells derived from resident epithelial cells, immigrant vascular endothelial cells, or fibroblast-like cells of unknown origin, and (2) that such tumours may contain more than one neoplastic cell type.


L9 ANSWER 43 OF 215 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 2000:238026 BIOSIS
DOCUMENT NUMBER: PREV200000238026
TITLE: Vascular endothelial cell dysfunction in pre-eclampsia: A role for oxidative stress.
AUTHOR(S): Poston, L. (1); Chappell, L.
CORPORATE SOURCE: (1) Fetal Health Research Group, Department of Obstetrics and Gynaecology, Guy's, King's and St Thomas' School of Medicine, London, SE1 UK
SOURCE: Journal of Physiology (Cambridge), (Feb., 2000) No. 523P, pp. 43S.
Meeting Info.: Joint Meetings of the Physiological Society. Birmingham, England, UK December 20-22, 1999 The Physiological Society
. ISSN: 0022-3751.
DOCUMENT TYPE: Conference
LANGUAGE: English
SUMMARY LANGUAGE: English
IT . . .
dysfunction
IT Diseases
pre-eclampsia: reproductive system disease/female, vascular disease
IT Chemicals & Biochemicals
fibronectin; interleukin-6 [IL-6]; plasminogen activator inhibitor [PAI-I]; tumor necrosis factor-alpha [TNF-alpha]; vascular cell adhesion molecule-1 [VCAM-1]; vitamin C: vitamin supplement; vitamin E: vitamin supplement; von Willebrand factor [vWF]
IT Alternate Indexing
Pre-Eclampsia (MeSH)

L9 ANSWER 44 OF 215 MEDLINE DUPLICATE 38
ACCESSION NUMBER: 2000390219 MEDLINE
DOCUMENT NUMBER: 20340493 PubMed ID: 10880370
TITLE: Bone marrow in polycythemia vera, chronic myelocytic leukemia, and myelofibrosis has an increased vascularity.
COMMENT: Erratum in: Am J Pathol 2000 Aug;157(2):690
AUTHOR: Lundberg L G; Lerner R; Sundelin P; Rogers R; Folkman J; Palmblad J
CORPORATE SOURCE: Departments of Medicine and Clinical Pathology, Stockholm Soder Hospital, Sweden.
SOURCE: AMERICAN JOURNAL OF PATHOLOGY, (2000 Jul) 157 (1) 15-9.
Journal code: 3RS; 0370502. ISSN: 0002-9440.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 200008
ED Entered STN: 20000818
Last Updated on STN: 20000922
Entered Medline: 20000808
AB Several studies have emphasized the significance of neoangiogenesis for tumor growth and progression, but few have focused on malignant hematological disorders. We studied vascular density and architecture in bone marrow samples of patients with chronic myeloproliferative disease (MPD). Vascular structures were immunostained (for von Willebrand factor/FVIII-RAG, CD31/PECAM or Ulex europeus I for vessels and for vascular endothelial growth factor, VEGF) in samples from patients with polycythemia vera (PV) (n = 7), chronic myelocytic leukemia (CML) (n. . .

L9 ANSWER 45 OF 215 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 2001:35171 BIOSIS
DOCUMENT NUMBER: PREV200100035171
TITLE: Selective estrogen receptor modulator idoxifene inhibits smooth muscle cell proliferation, enhances reendothelialization, and inhibits neointimal formation in vivo after vascular injury.
AUTHOR(S): Yue, Tian-Li (1); Vickery-Clark, Lynne; Louden, Calvert S.; Gu, Juan-Li; Ma, Xin L.; Narayanan, Padma K.; Li, Xiang; Chen, Jun; Storer, Barbara; Willette, Robert; Gossett, Kent A.; Ohlstein, Eliot H.
CORPORATE SOURCE: (1) Cardiovascular Pharmacology, SB, 709 Swedeland Rd, UW-2510, King of Prussia, PA, 19406: Tian-Li_Yue@sbphrd.com USA
SOURCE: Circulation, (November 7, 2000) Vol. 102, No. 19 Supplement, pp. III.281-III.288. print.
ISSN: 0009-7322.
DOCUMENT TYPE: Article
LANGUAGE: English
SUMMARY LANGUAGE: English
AB. . . bone and lipid metabolism while having negligible ER activity on the reproductive system. It is unknown whether ID retains the vascular protective effects of estrogen. Methods and Results-In cultured vascular smooth muscle cells (VSMCs), ID inhibited platelet-derived growth factor-induced DNA synthesis and mitogenesis with IC50 values of 20.4 and 27.5. . . ID resulted in S-phase cell cycle arrest in serum-stimulated VSMCs. ID 1 to 100 nmol/L significantly protected endothelial cells from tumor necrosis factor-alpha (TNF-alpha)-induced apoptosis in vitro. Virgin Sprague-Dawley rats ovariectomized 1 week before the study were treated with ID (1. . . ID significantly enhanced reendothelialization in the injured carotid arteries as determined by Evans blue stain and immunohistochemical analysis for von Willebrand factor. In the former assay, the reendothelialized area in injured vessels was 43% in ID-treated group versus 24% in the vehicle group (P<0.05); in the latter assay, the numbers of von Willebrand factor-positive cells per cross section increased from 24.8 (vehicle) to 60.5 (ID) (P<0.01) at day 14 after injury. In addition,. . . and 40%, respectively (P<0.01), at day 14 after balloon angioplasty. Conclusions-The results indicate that ID beneficially modulates the balloon denudation-induced vascular

injury response. Inhibition of VSMC proliferation and acceleration of endothelial recovery likely mediate this protective effect of ID.

L9 ANSWER 46 OF 215 MEDLINE DUPLICATE 39
ACCESSION NUMBER: 1999342075 MEDLINE
DOCUMENT NUMBER: 99342075 PubMed ID: 10411932
TITLE: Regulation of vascular endothelial growth factor production and angiogenesis by the cytoplasmic tail of tissue factor.
AUTHOR: Abe K; Shoji M; Chen J; Bierhaus A; Danave I; Micko C; Casper K; Dillehay D L; Nawroth P P; Rickles F R
CORPORATE SOURCE: Emory University School of Medicine, Atlanta, GA 30333, USA.
CONTRACT NUMBER: CA22202 (NCI)
SOURCE: PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, (1999 Jul 20) 96 (15) 8663-8. Journal code: PV3; 7505876. ISSN: 0027-8424.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199908
ED Entered STN: 19990910
Last Updated on STN: 19990910
Entered Medline: 19990823

AB Tissue factor (TF), a transmembrane receptor for coagulation factor VII/VIIa, is aberrantly expressed in human **cancers**. We demonstrated a significant correlation between TF and **vascular** endothelial growth factor (VEGF) production in 13 human malignant melanoma cell lines ($r(2) = 0.869$, $P < 0.0001$). Two of. . . a low TF and VEGF producer, were grown s.c. in severe combined immunodeficient mice. The high-producer cell line generated solid **tumors** characterized by intense **vascularity**, whereas the low producer generated relatively avascular **tumors**, as determined by immunohistologic staining of **tumor** **vascular** endothelial cells with anti-von **Willebrand** factor antibody. To investigate the structure-function relationship of TF and VEGF, a low-producer melanoma cell line (HT144) was transfected with. . . or no VEGF. Thus, the cytoplasmic tail of TF plays a role in the regulation of VEGF expression in some **tumor** cells.

L9 ANSWER 47 OF 215 MEDLINE DUPLICATE 40
ACCESSION NUMBER: 2000055683 MEDLINE
DOCUMENT NUMBER: 20055683 PubMed ID: 10589766
TITLE: Different patterns of angiogenesis in sarcomas and carcinomas.
AUTHOR: Tomlinson J; Barsky S H; Nelson S; Singer S; Pezeshki B; Lee M C; Eilber F; Nguyen M
CORPORATE SOURCE: Department of Surgery, University of California, Los Angeles 90095-1782, USA.
CONTRACT NUMBER: CA69433 (NCI)
SOURCE: CLINICAL CANCER RESEARCH, (1999 Nov) 5 (11) 3516-22. Journal code: C2H; 9502500. ISSN: 1078-0432.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200001
ED Entered STN: 20000114
Last Updated on STN: 20000114
Entered Medline: 20000106

AB Solid **tumors** depend on angiogenesis for growth and metastasis. It has been shown that blood vessel density, as determined by counting the. . . is a prognostic factor in sarcomas. In this study, we examined angiogenesis in sarcomas of various grades and compared their **vascular** patterns to those of carcinomas. Microvessels were identified by von **Willebrand** factor staining. The matrix of multiple sarcoma and breast carcinoma specimens were extracted and subjected to Western analysis of various. . . was also determined by in situ hybridization. In breast carcinomas, capillaries were clustered in bursts within the stroma of the **tumor**, whereas the sarcoma capillaries were homogeneously distributed in the **tumor** stroma. Random blood vessel density per high power field in sarcomas did not correlate with patient prognosis. The matrix of. . .

L9 ANSWER 48 OF 215 MEDLINE DUPLICATE 41
ACCESSION NUMBER: 1999274544 MEDLINE
DOCUMENT NUMBER: 99274544 PubMed ID: 10344747
TITLE: A novel animal model for hemangiomas: inhibition of hemangioma development by the angiogenesis inhibitor TNP-470.
AUTHOR: Liekens S; Verbeken E; Vandeputte M; De Clercq E; Neyts J
CORPORATE SOURCE: Rega Institute for Medical Research, University Hospitals, Leuven, Belgium.. Sandra.Liekens@rega.kuleuven.ac.be
SOURCE: CANCER RESEARCH, (1999 May 15) 59 (10) 2376-83. Journal code: CNF; 2984705R. ISSN: 0008-5472.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199906
ED Entered STN: 19990628
Last Updated on STN: 19990628
Entered Medline: 19990617

AB Hemangiomas represent the most frequent **tumors** of infancy. However, the pathogenesis of these **tumors** is still largely unknown, and current treatment of juvenile hemangiomas remains unsatisfactory. Here we present a novel animal model to. . . blood-filled cysts, histologically similar to human cavernous hemangiomas and stained positive for proliferating cell nuclear antigen, urokinase-type plasminogen activator, and **vascular** endothelial growth factor. Mature cerebral hemangiomas also expressed von **Willebrand** factor. Cerebral lesions caused death of the untreated animals within 19.2 +/- 1.1 days p.i. Remarkably fewer and smaller hemangiomas. . . s.c. with the angiogenesis inhibitor TNP-470. Accordingly, TNP-470 (50 mg/kg), administered twice a week from 3 days p.i., significantly delayed **tumor**-associated mortality [mean day of death, 28.2 +/- 3.3 ($P < 0.001$)]. Even if therapy was initiated when cerebral hemangiomas were. . . in hemangioma-associated mortality was observed. Also, the IFN-inducer polyinosinic-polycytidylic acid caused a delay of 9 days ($P < 0.005$) in **tumor**-associated mortality when administered i.p. at 5 mg/kg, twice a week, starting at day 3 p.i. The model described here may be useful for investigating (a) the angiogenic mechanism(s) underlying hemangioma progression; and (b) the effect of

anti-angiogenic compounds on vascular tumor growth.

L9 ANSWER 49 OF 215 MEDLINE DUPLICATE 42
ACCESSION NUMBER: 1999408742 MEDLINE
DOCUMENT NUMBER: 99408742 PubMed ID: 10477731
TITLE: Cultured endothelial cells from human arteriovenous malformations have defective growth regulation.
AUTHOR: Wautier M P; Boval B; Chappey O; Enjolras O; Wernert N; Merland J J; Wautier J L
CORPORATE SOURCE: Laboratoire de Biologie Vasculaire et Cellulaire, Unite de Formation et de Recherche Lariboisiere-St Louis, Paris 7, INTS, Paris, France.. wautier@ints.fr
SOURCE: BLOOD, (1999 Sep 15) 94 (6) 2020-8.
Journal code: A8G; 7603509. ISSN: 0006-4971.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 199910
ED Entered STN: 19991026
Last Updated on STN: 19991026
Entered Medline: 19991012

AB Vascular malformations are frequent in newborns, and they persist throughout life, which differentiates them from vascular tumors (eg, hemangiomas). Arteriovenous malformations are high-flow vascular malformations. They are considered nonmalignant but can expand and become a significant clinical risk when extensive. To characterize endothelial cells. . . After selection, the cells that grew out from explants had phenotypic and antigenic features (platelet endothelial cell adhesion molecule, von Willebrand factor) of human endothelial cells. Their spontaneous proliferation rate was higher (1.8 to 6.4 times) than that of human umbilical. . . or microvascular endothelial cells. The proliferation rate of AMEC was not sensitive to the inhibitory activity of various cytokines (interleukin-1beta, tumor necrosis factor-alpha, transforming growth factor-beta, Interferon-gamma). In basal conditions, intercellular adhesion molecule (ICAM-1) was detected at a higher level of expression (6- to 10-fold) on AMEC, but these cells failed to express E-selectin or the vascular cell adhesion molecule (VCAM-1) after cytokine stimulation. Expression of c-ets-1 proto-oncogene was shown by in situ hybridization. The low response. . .

L9 ANSWER 50 OF 215 MEDLINE DUPLICATE 43
ACCESSION NUMBER: 1999408484 MEDLINE
DOCUMENT NUMBER: 99408484 PubMed ID: 10480607
TITLE: Expression of alpha-1 proteinase inhibitor in human islet microvascular endothelial cells.
AUTHOR: Lou J; Triponez F; Oberholzer J; Wang H; Yu D; Buhler L; Cretin N; Mentha G; Wollheim C B; Morel P
CORPORATE SOURCE: Department of Surgery, University Hospital, University of Geneva, Switzerland.. lzheng@cmu.unige.ch
SOURCE: DIABETES, (1999 Sep) 48 (9) 1773-8.
Journal code: E8X; 0372763. ISSN: 0012-1797.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 199909
ED Entered STN: 19991012
Last Updated on STN: 19991012
Entered Medline: 19990930

AB . . . europaeus (Sigma, St. Louis, MO) agglutinin-1 (UEA-1)-coated dynabeads (Dynal A.S., Oslo, Norway). These purified human islet MVEC (HI-MVEC) express von Willebrand factor, take up high levels of acetylated LDL, and upregulate endothelial cell leukocyte adhesion molecule 1 in response to tumor necrosis factor-alpha. Ultrastructure examination shows the presence of microvilli and fenestrations on the cell surface, Weibel-Palade bodies in the cytoplasm, and tight junctions between cells. Furthermore, we show that vascular endothelial cell growth factor contributes to the formation of surface fenestrations on cultured HI-MVEC. After purification, HI-MVEC exhibit a very. . .

L9 ANSWER 51 OF 215 MEDLINE DUPLICATE 44
ACCESSION NUMBER: 2000021483 MEDLINE
DOCUMENT NUMBER: 20021483 PubMed ID: 10555012
TITLE: Epithelioid angiosarcoma associated with a Dacron vascular graft.
AUTHOR: Ben-Izhak O; Vlodavsky E; Ofer A; Engel A; Nitecky S; Hoffman A
CORPORATE SOURCE: Department of Pathology, Rambam Medical Center, Technion-Israel Institute of Technology, Haifa.
SOURCE: AMERICAN JOURNAL OF SURGICAL PATHOLOGY, (1999 Nov) 23 (11) 1418-22. Ref: 28
Journal code: 3YV; 7707904. ISSN: 0147-5185.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW OF REPORTED CASES)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199912
ED Entered STN: 20000113
Last Updated on STN: 20000113
Entered Medline: 19991208

AB Angiosarcoma developed at the site of a Dacron vascular prosthesis 8 years after an aortobifemoral bypass graft insertion. The tumor was composed of epithelioid cells, which showed positive staining for cytokeratin and expression of the common endothelial markers CD31, CD34, and von Willebrand factor. Ultrastructural examination showed aggregates of large cells with intercellular lumina and focal perinuclear whorls of intermediate filaments. The patient,. . . had abdominal pain and weight loss, died of disseminated pelvic and abdominal disease 6 months after diagnosis. Sarcomas associated with vascular Dacron grafts and angiosarcomas associated with metal or polymer foreign bodies are rare. Their development is probably analogous to the common experimental development of foreign body-associated sarcomas in rodents. Physicians caring for patients with vascular grafts or metal foreign bodies should be aware of this complication.

L9 ANSWER 52 OF 215 MEDLINE DUPLICATE 45
ACCESSION NUMBER: 1999194220 MEDLINE
DOCUMENT NUMBER: 99194220 PubMed ID: 10096556

TITLE: Controlling tumor angiogenesis and metastasis of C26 murine colon adenocarcinoma by a new matrix metalloproteinase inhibitor, KB-R7785, in two tumor models.
AUTHOR: Lozonschi L; Sunamura M; Kobari M; Egawa S; Ding L; Matsuno S
CORPORATE SOURCE: First Department of Surgery, Tohoku University School of Medicine, Sendai, Japan.
SOURCE: CANCER RESEARCH, (1999 Mar 15) 59 (6) 1252-8.
Journal code: CNF; 2984705R. ISSN: 0008-5472.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199904
ED Entered STN: 19990426
Last Updated on STN: 20000303
Entered Medline: 19990413

AB Experimental evidence has directly implicated matrix metalloproteinases (MMPs) in the remodeling of the stromal tissue surrounding **tumors**. Thus, MMP inhibitors could limit the expansion of both neoplastic cell compartment and endothelial cell compartment of a **tumor**. Much of the work on the role of MMP inhibitors has concentrated on their inhibitory effects on **tumor** cell invasion. We have examined the effects of a new MMP inhibitor, KB-R7785 (acting on MMP-1, MMP-3, and MMP-9), on **tumor** angiogenesis and metastasis of murine colon adenocarcinoma (C-26) in two **tumor** models in BALB/c mice (transparent chamber model and lung colonization model). KB-R7785 has not shown inhibitory effects on in vitro. . . KOP2.16 murine endothelial cells. In vivo, KB-R7785 administrated twice daily for 15 days (100 mg/kg, i.p.), starting the day of **tumor** inoculation (5 x 10(5) C26 cells) in transparent chamber, has resulted in 88.2% suppression of **tumor** growth, compared with that in vehicle-administered mice (controls). **Tumors** grown in controls have doubled their area in 3.3 days, whereas those treated by KB-R7785 progressed almost four times slower (**tumor** area doubling time, 12 days). KB-R7785 rendered centrally avascular **tumors** with only a rim of peripheral neovasculature, which had significant lower functional **vascular** density and **vascular** area than the corresponding parameters in control **tumors** 10 days after inoculation [79.9+/-6.7 cm/cm2 versus 164.1+/-10.1 cm/cm2 ($P < 0.01$) and 19.8+/-1.5% versus 42.6+/-2.7% ($P < 0.01$), respectively].. . . (100 mg/kg, i.p.) twice daily for 20 days has reduced the number of surface metastasis by 85.8% and abolished the **tumor** burden, as compared with controls. The few metastatic colonies found in the lungs of KB-R7785 treated mice appeared to be dormant (i.e., staining with von **Willebrand** factor antibody revealed few, if any, positive cells within the metastatic foci from MMP inhibitor-treated lungs, whereas terminal deoxynucleotidyl transferase-mediated nick end labeling showed a 4-fold increase in the rate of **tumor** cell apoptosis compared with controls. The fact that KB-R7785 interferes with early steps of angiogenesis and **cancer** spread suggests that MMP inhibitors may control both primary and secondary **tumor** growths by limiting the expansion of endothelial cells, as well as **cancer** cells, composing the **tumors**.

L9 ANSWER 53 OF 215 MEDLINE DUPLICATE 46
ACCESSION NUMBER: 1999405764 MEDLINE
DOCUMENT NUMBER: 99405764 PubMed ID: 10478659
TITLE: Papillary intralymphatic angioendothelioma (PILA): a report of twelve cases of a distinctive vascular tumor with phenotypic features of lymphatic vessels.
AUTHOR: Fanburg-Smith J C; Michal M; Partanen T A; Alitalo K; Miettinen M
CORPORATE SOURCE: Department of Soft Tissue Pathology, Armed Forces Institute of Pathology, Washington, DC 20306-6000, USA.
SOURCE: AMERICAN JOURNAL OF SURGICAL PATHOLOGY, (1999 Sep) 23 (9) 1004-10.
Journal code: 3YV; 7707904. ISSN: 0147-5185.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199909
ED Entered STN: 19991005
Last Updated on STN: 19991005
Entered Medline: 19990923

AB Six childhood **vascular tumors** were designated as "malignant endovascular papillary angioendothelioma" by Dabska in 1969. Since then, a few reports of similar cases were published, often called "Dabska **tumors**." Twelve similar cases were identified in review of **vascular tumors** from the authors' institutions. There were five men and seven women, including seven adults. Patient ages ranged from 8 to 59 years (mean, 30 years). The **tumors** occurred in the dermis or subcutis of the buttocks or thigh (n = 6), thumb or hand (n = 3), abdomen (n = 2), and heel (n = 1). The **tumor** sizes ranged from 1 to more than 40 cm (mean, 7.0 cm). The unifying feature of all cases was distinctive. . . mitotic activity. Two cases had an adjacent lymphangioma, and two additional cases had clusters of lymphatic vessels adjacent to the **tumor**. All but two of the cases showed varying degrees of stromal or intraluminal lymphocytes. Occasional epithelioid endothelial cells were seen, but no cases had features typical of epithelioid, spindle cell, or retiform hemangioendothelioma. **Tumor** cells were positive for vimentin, von **Willebrand** factor, CD31, and focally for CD34 and were negative for keratins, epithelial membrane antigen, S-100 protein, and desmin. **Vascular** endothelial cell growth factor receptor type 3, a recently introduced marker for lymphatic endothelia, was positive in all eight cases. . . 17 years (mean, 9 years). Based on the proliferative borderline features and the lymphatic phenotype, we propose to designate these **tumors** as papillary intralymphatic angioendothelioma. Additional cases with extensive follow-up should be studied to rule out variants with malignant potential.

L9 ANSWER 54 OF 215 MEDLINE DUPLICATE 47
ACCESSION NUMBER: 1999265405 MEDLINE
DOCUMENT NUMBER: 99265405 PubMed ID: 10334236
TITLE: Association of vascular endothelial growth factor expression with angiogenesis and lymph node metastasis in nasopharyngeal carcinoma.
AUTHOR: Wakisaka N; Wen Q H; Yoshizaki T; Nishimura T; Furukawa M; Kawahara E; Nakanishi I
CORPORATE SOURCE: Department of Otolaryngology, School of Medicine, Kanazawa University, Ishikawa, Japan.

SOURCE: LARYNGOSCOPE, (1999 May) 109 (5) 810-4.
Journal code: L1W; 8607378. ISSN: 0023-852X.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199906
ED Entered STN: 19990618
Last Updated on STN: 19990618
Entered Medline: 19990608

AB OBJECTIVE: Recent experimental evidence indicates that angiogenesis affects tumor growth and metastasis. Vascular endothelial growth factor (VEGF) is considered to be an important regulator of tumor angiogenesis. The present study was designed to examine the role of VEGF on angiogenesis and lymph node metastasis in primary. . . consisted of 22 differentiated nonkeratinizing carcinomas and seven undifferentiated carcinomas. METHODS: Microvessels were highlighted by staining endothelial cells with von Willebrand factor (VWF) using immunohistochemical techniques, and were counted (per x 400 field) in the most active area of angiogenesis on light microscopy.. . .

L9 ANSWER 55 OF 215 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2000:275740 CAPLUS
DOCUMENT NUMBER: 133:175463
TITLE: The expression of vascular endothelial growth factor type C and its receptors, and their clinical implications in primary non-small cell lung cancers--the association with lymphatic metastasis
AUTHOR(S): Kajita, Takeshi
CORPORATE SOURCE: Department of Surgery ( I ), School of Medicine, Kanazawa University, Kanazawa, 920-8640, Japan
SOURCE: Kanazawa Daigaku Juzen Igakkai Zasshi (1999), 108(6), 695-707
CODEN: JUZIAG; ISSN: 0022-7226
PUBLISHER: Juzen Igakkai
DOCUMENT TYPE: Journal
LANGUAGE: Japanese

AB To evaluate the role of vascular endothelial growth factor type C (VEGF-C) in primary non-small cell lung cancer, VEGF-C mRNA and protein expression were analyzed using 6 lung cancer cell lines, 30 freshly frozen resected specimens, and 62 paraffin-embedded specimens. For the assessment of the correlation between VEGF-C and its receptors, VEGF receptor-3 (VEGFR-3) and VEGF receptor-2 (VEGFR-2) expression were also analyzed. Reverse transcription PCR anal. revealed that VEGF-C mRNA was detected in 66.6% (4/6) of lung cancer cell lines examd. In clin. samples, over-expression of VEGF-C mRNA in the tumor tissue as compared to the adjacent normal lung tissue was not clear. In three of six (50%) lung cancer cell lines, VEGFR-3 mRNA was detected. Western blot anal. revealed that VEGFR-3 protein was detected in five of six (83.3%) lung cancer cell lines. As a result of immunohistochem., the VEGF-C antigen was mainly obsd. in the cytoplasm of cancer cells. The percentage of the patients with pos. VEGF-C expression was 38.7% (24/62). A significant pos. correlation was clearly found between the VEGF-C expression in cancer cells and VEGFR-3 expression in vascular endothelial cells ($p<0.01$). Moreover, the expression of VEGF-C protein in cancer cells was significantly assocd. with the intensity of both VEGFR-3 and VEGFR-2 staining in cancer cells (both $p<0.05$). The relationship between microvessel d. evaluated by using antibody against von Willebrand factor and VEGF-C protein expression was not statistically significant. The VEGF-C protein expression was significantly greater in the male group (46.6%) than in the female group (17.6%). The VEGF-C protein expression in patients with lymph node metastasis (56.0%) was significantly greater than that in patients without lymph node metastasis (27.0%) ($p<0.05$). The VEGF-C protein expression in patients with pos. lymphatic invasion (58.3%) was significantly greater than that in patients with neg. lymphatic invasion (26.3%) ($p<0.05$). The VEGF-C protein expression in patients with stage III/IV Diseases (55.5%) was significantly greater than that in those with stage I/II diseases (25.7%) ($p<0.05$). Univariate anal. demonstrated that the patients with VEGF-C protein expression had significantly poorer outcomes as compared to those without it ($p<0.05$). These results suggest that VEGF-C is assocd. with lymphatic metastasis and tumor progression. As for the mechanisms underlying the lymphatic metastasis, the results of this study suggested the existence of an autocrine mechanism that may induce some biol. behavior in lung cancer cells and promote cancer development, in addn. to the paracrine mechanism that facilitates angiogenesis/lymphangiogenesis.

L9 ANSWER 56 OF 215 MEDLINE DUPLICATE 48
ACCESSION NUMBER: 2000393801 MEDLINE
DOCUMENT NUMBER: 20374363 PubMed ID: 10919710
TITLE: Phenotypic and functional characteristics of tumour-derived microvascular endothelial cells.
AUTHOR: Alessandri G; Chirivi R G; Fiorentini S; Dossi R; Bonardelli S; Giulini S M; Zanetta G; Landoni F; Graziotti P P; Turano A; Caruso A; Zardi L; Giavazzi R; Bani M R
CORPORATE SOURCE: Institute of Microbiology University of Brescia, Italy.
SOURCE: CLINICAL AND EXPERIMENTAL METASTASIS, (1999) 17 (8) 655-62.
Journal code: DFC; 8409970. ISSN: 0262-0898.
PUB. COUNTRY: Netherlands
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200008
ED Entered STN: 20000824
Last Updated on STN: 20000824
Entered Medline: 20000817

AB We recently developed a method for the isolation and purification of tumour-derived endothelium. In this study the phenotypic and functional properties of human tumour-derived microvascular endothelial cells (TdMEC) were examined. Endothelium obtained from human adrenal gland specimens (HAMEC) was used as a reference microvascular. . with the typical morphological appearance of endothelium and were positive for endothelial markers such as Ulex-1 lectin, CD31 antigen, von Willebrand Factor and VE-cadherin. The addition of acidic Fibroblast Growth Factor (aFGF), basic FGF (bFGF) or Vascular Endothelial Growth Factor (VEGF) substantially improved proliferation of TdMEC; and kidney carcinoma derived endothelial cells were more responsive to FGFs,. . . in vitro maintain several of the features described for microvasculature. Thus, TdMEC represent a useful tool to study markers for tumor vasculature.

L9 ANSWER 57 OF 215 MEDLINE DUPLICATE 49
ACCESSION NUMBER: 1999298728 MEDLINE
DOCUMENT NUMBER: 99298728 PubMed ID: 10370590
TITLE: Role of angiogenesis in hepatitis and hepatocellular carcinoma.
AUTHOR: Ker C G; Chen H Y; Juan C C; Lo H W; Shen Y Y; Chen J S; Lee K T; Sheen P C
CORPORATE SOURCE: Institute of Gastroenterology, Yuan's General Hospital, Haohsiung, Taiwan.
SOURCE: HEPATO-GASTROENTEROLOGY, (1999 Mar-Apr) 46 (26) 646-50. Journal code: GA7; 8007849. ISSN: 0172-6390.
PUB. COUNTRY: Greece
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199908
ED Entered STN: 19990827
Last Updated on STN: 19990827
Entered Medline: 19990813
AB BACKGROUND/AIMS: Hepatocellular carcinoma (HCC) is usually a hypervascular **tumor**. Factor VIII-related antigens, including von **Willebrand** factor, are known to be expressed in HCC, which cause capillarization of the sinusoids of HCC. Capillarization of hepatic sinusoids. . . . of HCC patients the positive rate was 68.7% (11/16) showing a significant difference from the hepatitis group. The amount of **vasculatures** was easily found in the surrounding capsule of resected HCC. The MVC of the capsule was 10.17 +/- 2.78 and. . . . were found in patients of direct invasion. However, there was no relation between hepatitis B or hepatitis C to the **tumor** invasiveness. The median survival times were 21.5 months for the non-invasive group and 14.5 months for the invasive group (p. . .

L9 ANSWER 58 OF 215 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 2000:86987 BIOSIS
DOCUMENT NUMBER: PREV200000086987
TITLE: Overexpression of circulating vascular endothelial growth factor (VEGF) in leukocytoclastic vasculitis.
AUTHOR(S): Viac, J. (1); Pernet, I.; Schmitt, D.; Claudy, A.
CORPORATE SOURCE: (1) INSERM U346 et Clinique Dermatologique, Hopital E. Herriot, 69437, Lyon Cedex 03 France
SOURCE: Archives of Dermatological Research, (Nov., 1999) Vol. 291, No. 11, pp. 622-623. ISSN: 0340-3696.
DOCUMENT TYPE: Article
LANGUAGE: English
IT . . .
connective tissue disease, immune system disease, joint disease
IT Chemicals & Biochemicals
C3; GRO-alpha; IL-1 [interleukin-1]; IL-8 [interleukin-8]; RANTES; TNF-alpha [**tumor** necrosis factor-alpha]; immune complexes; interstitial collagenase; plasma proteins; **vascular** endothelial growth factor: circulating, overexpression; von **Willebrand** factor
IT Alternate Indexing
Neoplasms (MeSH); Arthritis, Rheumatoid (MeSH)

L9 ANSWER 59 OF 215 MEDLINE DUPLICATE 50
ACCESSION NUMBER: 2000036198 MEDLINE
DOCUMENT NUMBER: 20036198 PubMed ID: 10571420
TITLE: Different vascular patterns of medulloblastoma and supratentorial primitive neuroectodermal tumors.
AUTHOR: Goldbrunner R H; Pietsch T; Vince G H; Bernstein J J; Wagner S; Hageman H; Selby D M; Krauss J; Soerensen N; Tonn J C
CORPORATE SOURCE: Department of Neurosurgery, University of Wuerzburg, Germany.. goldbrunner@mail.uni.wuerzburg.de
SOURCE: INTERNATIONAL JOURNAL OF DEVELOPMENTAL NEUROSCIENCE, (1999 Aug-Oct) 17 (5-6) 593-9. Journal code: 126; 8401784. ISSN: 0736-5748.
PUB. COUNTRY: ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199912
ED Entered STN: 20000113
Last Updated on STN: 20000113
Entered Medline: 19991221
AB Astrocytoma **vasculature** patterns differ according to histological grade of malignancy with glioblastoma multiforme (WHO grade IV) showing most extensive endothelial proliferation. Here, we determined whether the **vascular** patterns of medulloblastoma and supratentorial primitive neuroectodermal **tumors** (PNETs), which can be hardly distinguished histopathologically, differ. We evaluated the spatial organization of vessels in medulloblastomas and PNETs using antibodies to von Willebrand factor (vWF) and CD34. Medulloblastoma capillaries showed slight endothelial cell hyperplasia. Microvessels sprouted from the capillaries and formed glomeruloid clusters. There were. . . endothelial cell hyperplasia. Glomeruloid arrays of microvessels extended from the capillaries. Small fragments of endothelial tubes were scattered throughout the **tumor**. Therefore, medulloblastomas and supratentorial PNETs showed different spatial organization of **tumor** vessels which can be used for differentiation of each **tumor** entity. These **vascular** patterns may reflect different **tumor** derived angiogenic stimuli.

L9 ANSWER 60 OF 215 MEDLINE DUPLICATE 51
ACCESSION NUMBER: 1999368596 MEDLINE
DOCUMENT NUMBER: 99368596 PubMed ID: 10398090
TITLE: Inducible nitric oxide synthase expression in vascular and glomerular structures of human chronic allograft nephropathy.
AUTHOR: Romagnani P; Pupilli C; Lasagni L; Baccari M C; Bellini F; Amorosi A; Bertoni E; Serio M
CORPORATE SOURCE: Department of Physiopathology, University of Florence, Italy.
SOURCE: JOURNAL OF PATHOLOGY, (1999 Feb) 187 (3) 345-50. Journal code: JLB; 0204634. ISSN: 0022-3417.
PUB. COUNTRY: ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199908

ED Entered STN: 19990910
Last Updated on STN: 19990910
Entered Medline: 19990823

AB . . . with graft failure due to chronic rejection. As controls, kidney specimens were obtained from patients undergoing nephrectomies for primary renal **tumours**, and from patients suffering from IgA nephropathy or mesangial-proliferative glomerulonephritis. In normal kidneys, iNOS production was absent or limited to. . . . and in situ hybridization. In contrast, in CAN, iNOS protein was localized not only in inflammatory cells, but also in **vascular**, glomerular, and, more rarely, tubular structures. Accordingly, in situ hybridization localized iNOS mRNA in both macrophages and lymphocytes, as well as in **vascular** structures and glomeruli. Double immunostaining for iNOS and a-smooth muscle actin (a-SMA) or von **Willebrand** factor (**vWf**) revealed that smooth muscle cells were the main **vascular** source of iNOS, while both mesangial and inflammatory cells were immunostained at the glomerular level. These data demonstrate that macrophages and lymphocytes are not the only source of iNOS mRNA and protein in human CAN. **Vascular** smooth muscle and mesangial cells also synthesize iNOS, raising the question of heterogeneous regulation and function of iNOS in this. . .

L9 ANSWER 61 OF 215 MEDLINE DUPLICATE 52
ACCESSION NUMBER: 1999376896 MEDLINE
DOCUMENT NUMBER: 99376896 PubMed ID: 10446100
TITLE: Evaluation of laser doppler flowmetry for the study of benign and malignant gastric blood flow in vivo.
AUTHOR: Schilling M K; Redaelli C; Friess H; Blum B; Signer C; Maurer C A; Buchler M W
CORPORATE SOURCE: Department of Visceral and Transplant Surgery, University of Bern, Inselspital, Bern, Switzerland.
SOURCE: GUT, (1999 Sep) 45 (3) 341-5.
Journal code: FVT; 2985108R. ISSN: 0017-5749.
PUB. COUNTRY: ENGLAND: United Kingdom
(CLINICAL TRIAL)
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 199909
ED Entered STN: 19991012
Last Updated on STN: 19991012
Entered Medline: 19990928

AB BACKGROUND: **Tumour vascularisation** is a determinant of the development of metastases. AIMS: To measure blood flow in normal stomach and gastric adenocarcinomas by laser Doppler flowmetry and correlate blood flow with **vascularisation** after immunohistochemical staining of resected specimens for CD31 and von **Willebrand** factor. PATIENTS: Twenty two undergoing resection for gastric adenocarcinoma and 10 undergoing cholecystectomy. RESULTS: Mean (SD) gastric blood flow was. . . (322 (120) PU, p<0.01 v normal stomach) but lower in the centre (74 (27) PU, p<0.01 v normal stomach and **tumour** border). Blood flow was higher in **tumours** staged T>/=3 than in those staged T<3. Blood vessel density in normal stomach was 41 (8) stained cells/field viewed and. . .

L9 ANSWER 62 OF 215 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1999:422050 CAPLUS
DOCUMENT NUMBER: 131:241163
TITLE: Changes of plasma vWF, TM, ET in acute leukemia
AUTHOR(S): Zhao, Chunping; Li, Jinglan; Zhao, Zien; Cao, Jinni
CORPORATE SOURCE: Department of Hematology, First Central Hospital, Tianjin, 300192, Peop. Rep. China
SOURCE: Tianjin Yiyao (1999), 27(5), 286-287
CODEN: TIYADG; ISSN: 0253-9896
PUBLISHER: Tianjin Yixue Zazhishe
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
IT Biomarkers (biological responses)
**Tumor** markers
(von **Willebrand** factor, thrombomodulin and endothelin as mol. markers indicating **vascular** endothelium injury in acute leukemia in human)

L9 ANSWER 63 OF 215 MEDLINE DUPLICATE 53
ACCESSION NUMBER: 1999165579 MEDLINE
DOCUMENT NUMBER: 99165579 PubMed ID: 10068210
TITLE: Transgenic TIMP-1 inhibits simian virus 40 T antigen-induced hepatocarcinogenesis by impairment of hepatocellular proliferation and tumor angiogenesis.
AUTHOR: Martin D C; Sanchez-Sweatman O H; Ho A T; Inderdeo D S; Tsao M S; Khokha R
CORPORATE SOURCE: Department of Medical Biophysics, University of Toronto, Ontario Cancer Institute, Canada.
SOURCE: LABORATORY INVESTIGATION, (1999 Feb) 79 (2) 225-34.
Journal code: KZ4; 0376617. ISSN: 0023-6837.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199904
ED Entered STN: 19990413
Last Updated on STN: 20000303
Entered Medline: 19990401

AB Tissue inhibitors of metalloproteinases (TIMP) block proteolytic degradation of extracellular matrix and consequently impede **tumor** invasion and metastasis. In addition, we have previously reported that hepatic TIMP-1 modulation alters the susceptibility of the liver to oncogene (simian virus 40 T-antigen; TAg)-induced **tumorigenesis** in a double-transgenic mouse model. To identify the cellular processes by which TIMP-1 inhibits hepatocarcinogenesis, we examined the effects of TIMP-1 on four specific events that are important during **tumorigenesis**: hepatocellular proliferation, apoptosis, the stromal characteristics of the liver, and **tumor vascularization**. Transgenic mice with elevated or reduced hepatic TIMP-1 expression were bred independently with TAg transgenics. Liver tissue from littermates were analyzed by in situ hybridization with TIMP-1 cDNA probes; gelatin enzymography; immunohistochemistry for proliferating cell nuclear antigen, von **Willebrand** factor, and collagen type IV; reticulin histochemistry; and collagens type III and IV, laminin, fibronectin, and CD31 immunoblotting. We demonstrate. . . including collagens type III and IV, laminin, and fibronectin. Moreover, the hepatocellular carcinomas formed in TIMP-1-overexpressing mice had significantly reduced **tumor vascularization**;

conversely, tumor vascularization was significantly increased in TIMP-1-reduced livers. These data indicate that TIMP-1 inhibits TAg-induced hepatocarcinogenesis by altering hepatocellular proliferation and tumor vascularization, without any effect on hepatocyte apoptosis and stromal composition. To our knowledge, this is the first in vivo demonstration that. . . modulation of TIMP-1 inhibits cellular proliferation and angiogenesis during hepatocarcinogenesis. This potentially extends the use of matrix metalloproteinase inhibitors in cancer beyond control of invasion and metastasis.

L9 ANSWER 64 OF 215 MEDLINE
ACCESSION NUMBER: 2000048559 MEDLINE
DOCUMENT NUMBER: 20048559 PubMed ID: 10581858
TITLE: The metastases of lung cancer to the brain--the examination of angiogenesis and p53 expression.
AUTHOR: Rzepko R; Izycka-Swieszewska E; Borowska-Lehman J
CORPORATE SOURCE: Department of Pathology, Medical University, Gdansk.
SOURCE: FOLIA NEUROPATHOLOGICA, (1999) 37 (3) 195-8.
Journal code: B37; 9437431.
PUB. COUNTRY: Poland
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200002
ED Entered STN: 20000218
Last Updated on STN: 20000218
Entered Medline: 20000208

AB . . . aim of the present study was to investigate the intensity of angiogenesis and p53 protein expression in metastases of lung cancer to the brain. There were eight cases of squamous cell type and nine adenocarcinomas among 17 examined cases of metastatic carcinomas. The antibodies against von Willebrand factor (vWF)--to highlight the microvessels and against p53 protein--for detection of immunopositive cells were used. The intensity of angiogenesis was represented by the mean number of the blood vessels in three tumor fields with the highest microvascular density ("hot spots"). The measurements were taken in three microscopic fields under 200x magnification (the examined area was 0.785 mm2). The mean number of p53-positive cells in three tumor areas under 200x magnification with the highest number of p53-positive cells was the measure of protein p53 expression. The values of vascular density and p53 expression differed a lot among the examined tumors. The values of vascular density were between 4.2-106 vessels/mm2 (mean value 49.3 vessel/mm2). The number of p53-immunopositive cells was between 0-284 cells/mm2 (mean value. . .

L9 ANSWER 65 OF 215 MEDLINE
ACCESSION NUMBER: 2000048556 MEDLINE
DOCUMENT NUMBER: 20048556 PubMed ID: 10581855
TITLE: Recurrent meningiomas--the immunohistochemical analysis of angiogenesis and cellular proliferation. Preliminary study.
AUTHOR: Izycka-Swieszewska E; Rzepko R; Borowska-Lehman J; Baranowska E; Warzocha D
CORPORATE SOURCE: Department of Pathomorphology, Medical University, Gdansk.
SOURCE: FOLIA NEUROPATHOLOGICA, (1999) 37 (3) 179-84.
Journal code: B37; 9437431.
PUB. COUNTRY: Poland
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200002
ED Entered STN: 20000218
Last Updated on STN: 20000218
Entered Medline: 20000208

AB Meningiomas exhibit a tendency to the local regrowth after their surgical resection, and some of those recurrent tumors show histological malignancy progression. The present study was performed on 10 cases of recurrent meningiomas chosen out of total 122. . . operated three times. In three cases at the second operation there was progression from benign to atypical meningioma. The other tumors did not change their histological grade (four benign, one atypical and two anaplastic). The tumor tissue section were stained immunohistochemically with monoclonal antibodies raised against epithelial membrane antigen (EMA), Ki-67 and von Willebrand factor (vWf). The percentage of EMA-positive cells and Ki-67 immunoreactive cells (proliferation cell index--PCI) were counted. The vascular density (number of blood vessels/mm2) was assessed in the preparations stained with anti-vWf, as the measure of the intensity of angiogenesis. The values of the examined parameters were greatly differentiated within both the initial and the recurrent tumor groups. The values of vascular density ranged 12-96 vessels/mm2, the percentage of EMA-positive cells was 0.75%, PCI was from 0.3 to 9.3%. The values of. . . significantly between initial and recurrent meningiomas groups. It is however worth to point out that PCI in the most recurrent tumors were higher than in their primary counterparts.

L9 ANSWER 66 OF 215 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1999:154184 CAPLUS
DOCUMENT NUMBER: 130:324217
TITLE: IL-8 mRNA expression by in situ hybridization in human pituitary adenomas
AUTHOR(S): Suliman, M. E. R.; Royds, J. A.; Baxter, L.; Timperley, W. R.; Cullen, D. R.; Jones, T. H.
CORPORATE SOURCE: Department of Endocrinology, Royal Hallamshire Hospital, University of Sheffield, Sheffield, UK
SOURCE: Eur. J. Endocrinol. (1999), 140(2), 155-158
CODEN: EJOEEP; ISSN: 0804-4643
PUBLISHER: BioScientifica
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 15
REFERENCE(S): (5) Hebert, C; Cancer Investigation 1993, V11, P743 CAPLUS
(9) Koch, A; Science 1992, V258, P1798 CAPLUS
(10) Koike, K; Biochemical and Biophysical Research Communications 1994, V202, P161 CAPLUS
(12) Ray, D; Endocrine Reviews 1997, V18, P206 CAPLUS
(13) Renner, U; European Journal of Endocrinology 1996, V135, P515 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB Several cytokines have been shown to be expressed in normal and adenomatous pituitary tissue. Recently, interleukin-8 (IL-8) mRNA was

identified by reverse transcription (RT)-PCR in each of a series of 17 pituitary tumors examd. The authors investigated further the presence of IL-8 mRNA, using in situ hybridization in 2 normal human anterior pituitary specimens and 25 human pituitary adenomas. IL-8 mRNA was not identified in either of the 2 normal pituitary specimens. Only 3 of the 25 adenomas were pos. for IL-8 mRNA. In these 3 tumors, which included 2 null cell adenomas and 1 gonadotrophinoma, the majority of tumor cells (>90%) were pos. for IL-8 mRNA. The remaining 22 adenomas were completely neg. There was no difference in tumor size or type between the IL-8 pos. and the IL-8 neg. tumors, and immunocytochem. for von Willebrand factor showed that the 2 groups were also similar in their degree of vascularization. Thus, IL-8 mRNA was found in 12% of pituitary adenomas studied and was histol. identified within the tumor cells. In situ hybridization is a more appropriate technique for assessing cytokine mRNA prodn. by human pituitary tumors because RT-PCR may be too sensitive, identifying very small, possibly pathol. insignificant, quantities of mRNA that could be produced by supporting cells such as fibroblasts, endothelial cells, or macrophages.

L9 ANSWER 67 OF 215 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 1999:375641 BIOSIS
DOCUMENT NUMBER: PREV199900375641
TITLE: Endometrial endothelial cells express estrogen and progesterone receptors and exhibit a tissue specific response to angiogenic growth factors.
AUTHOR(S): Iruela-Arispe, M. Luisa (1); Rodriguez-Manzaneque, Juan Carlos; Abu-Jawdeh, Graziella
CORPORATE SOURCE: (1) Department of Molecular Cell and Developmental Biology, Molecular Biology Institute, 611 Circle Drive East, Los Angeles, CA, 90095 USA
SOURCE: Microcirculation (New York), (June, 1999) Vol. 6, No. 2, pp. 127-140.
ISSN: 1073-9688.
DOCUMENT TYPE: Article
LANGUAGE: English
SUMMARY LANGUAGE: English
IT . . .
agglutinin-1; angiogenic growth factors: tissue specific response; anti-CD4-coated beads; anti-E-selectin; anti-PECAM; collagenase; estrogen receptor: expression; progesterone receptors: expression; trypsin; von Willebrand's factor; E-selectin: upregulation; FLT-1: increase; KDR: increase; PECAM: expression; TNF-alpha [ tumor necrosis factor-alpha]; VEGF [vascular endothelial growth factor]: binding affinity

L9 ANSWER 68 OF 215 MEDLINE DUPLICATE 54
ACCESSION NUMBER: 1999103740 MEDLINE
DOCUMENT NUMBER: 99103740 PubMed ID: 9888665
TITLE: Angiogenesis, angiogenic growth factors, and cell adhesion molecules are upregulated in chronic pancreatic diseases: angiogenesis in chronic pancreatitis and in pancreatic cancer.
AUTHOR: Kuehn R; Lelkes P I; Bloechle C; Niendorf A; Izbicki J R
CORPORATE SOURCE: Department of Surgery, University Hospital Eppendorf, University of Hamburg, Germany.
SOURCE: PANCREAS, (1999 Jan) 18 (1) 96-103.
Journal code: PRS; 8608542. ISSN: 0885-3177.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199903
ED Entered STN: 19990326
Last Updated on STN: 19990326
Entered Medline: 19990315
AB . . . controls, absolute numbers of blood vessels and relative blood vessel density were assessed after immunostaining of endothelial cells for von Willebrand factor and PECAM-1 (platelet/ endothelial cell adhesion molecule-1). Furthermore, the expression of cell adhesion molecules ICAM-1 (intercellular adhesion molecule-1) and VCAM-1 ( vascular cell adhesion molecule-1) and of VEGF (vascular endothelial growth factor) was investigated in all specimens. Both CP and PCA exhibited areas of high vascular density ("hot spots"). The mean number of blood vessels in these areas in PCA was 132.2+/-16.8 per mm2, and in. . . PCA than in CP. Enhanced expression of ICAM-1 in CP and PCA was seen in ductal cells in CP and cancer cells. In controls, ICAM-1 and VCAM-1 were expressed only at low levels in endothelial cells. VCAM-1 was strongly expressed in. . . in ductal cells. In CP and PCA, VEGF was strongly expressed in ductal cells in CP as well as in cancer cells. We show for the first time that angiogenic activity is increased in both CP and PCA. Based on this. . .

L9 ANSWER 69 OF 215 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.DUPLICATE 55
ACCESSION NUMBER: 1999057706 EMBASE
TITLE: Smoking tobacco, microcirculatory changes and the role of nicotine.
AUTHOR: Haustein K.-O.
CORPORATE SOURCE: Prof. K.-O. Haustein, Friedrich-Schiller-Universitat Jena, Klinische Pharmakologie Erfurt, Nordhauser Strasse 78, D-99089 Erfurt, Germany
SOURCE: International Journal of Clinical Pharmacology and Therapeutics, (1999) 37/2 (76-85).
Refs: 75
ISSN: 0946-1965 CODEN: ICTHEK
COUNTRY: Germany
DOCUMENT TYPE: Journal; General Review
FILE SEGMENT: 017 Public Health, Social Medicine and Epidemiology
030 Pharmacology
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English
AB Cigarette smoking has become a worldwide threat to the health of several million people. Even more frequently than the cancerogenic effect of tobacco smoking, changes in the cardiovascular system occur in the form of coronary heart disease, hypertension, peripheral arterial. . . raised blood and plasma viscosity, reduced deformability of erythrocytes, raised leukocyte counts, activation of various coagulation factors (factor XII, von Willebrand factor), an increased tendency to thrombocyte aggregation and increased integration of fibrinogen in the vascular endothelium. Smoking is also partly responsible for activation of the adrenergic system. Measures to help smokers quit smoking are proposed. . .

L9 ANSWER 70 OF 215 CAPLUS COPYRIGHT 2001 ACS DUPLICATE 56
ACCESSION NUMBER: 1999:299385 CAPLUS
DOCUMENT NUMBER: 131:128339
TITLE: Increased vascular endothelial growth factor in tumor cells and increased production of the receptor for urokinase plasminogen activator in endothelial cells are associated with lymph node metastasis in human breast cancer
AUTHOR(S): Bastholm, Lone; Nielsen, Morten H.; Enggaard, Christian; Rank, Fritz; Elling, Folmer
CORPORATE SOURCE: Institute of Molecular Pathology, Faculty of Health Sciences, University of Copenhagen, Copenhagen, DK-2100, Den.
SOURCE: Appl. Immunohistochem. Mol. Morphol. (1999), 7(1), 39-47
CODEN: AIMMFN
PUBLISHER: Lippincott Williams & Wilkins
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 44
REFERENCE(S): (1) Andreasen, P; Int J Cancer 1997, V72, P1 CAPLUS
(4) Bastholm, L; Immunogold-silver staining Principles, methods, and applications 1995, P149 CAPLUS
(5) Blasi, F; Bioassays 1993, V15, P105 CAPLUS
(7) Boehm, T; Nature 1997, V390, P404 CAPLUS
(8) Brown, L; EXS 1997, V79, P233 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB Breast **cancer** tissue from patients with or without lymph node metastasis was examd. by light immunohistochem. for **vascular** endothelial cell growth factor, urokinase plasminogen activator, urokinase plasminogen activator receptor, the platelet endothelial adhesion mol. CD31, von **Willebrand** factor, and .alpha.-smooth muscle actin. The plasminogen activator receptor and CD31 were also examd. by immunoelectron microscopy. Staining for **vascular** endothelial cell growth factor was increased in **tumor** cells from patients with lymph node metastasis compared with patients with localized disease, and the d. of microvessels and endothelial cells in close proximity to **tumor** cells was higher in the former group of patients. This was paralleled with an increased staining for the receptor for urokinase plasminogen activator in endothelial cells adjacent to the **vascular** endothelial cell growth factor pos. **tumor** cells in six of seven patients with lymph node spread. Ultrastructurally the urokinase plasminogen activator receptor was localized in large cytoplasmatic vacuoles and at the leading edge of endothelial cells. It has been shown in vitro that **vascular** endothelial cell growth factor upregulated the urokinase plasminogen activator receptor on migrating endothelial cells thus facilitating angiogenesis, and the present findings suggest that this mechanism occurs in human breast **cancer** in assocn. with lymph node metastasis.

L9 ANSWER 71 OF 215 MEDLINE DUPLICATE 57
ACCESSION NUMBER: 1998438335 MEDLINE
DOCUMENT NUMBER: 98438335 PubMed ID: 9763564
TITLE: Tissue distribution and regulation of murine von Willebrand factor gene expression in vivo.
AUTHOR: Yamamoto K; de Waard V; Fearns C; Loskutoff D J
CORPORATE SOURCE: Department of Vascular Biology (VB-3), The Scripps Research Institute, La Jolla, CA, USA.
SOURCE: BLOOD, (1998 Oct 15) 92 (8) 2791-801.
Journal code: A8G; 7603509. ISSN: 0006-4971.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 199811
ED Entered STN: 19990106
Last Updated on STN: 19990106
Entered Medline: 19981109

AB von **Willebrand** factor (**vWF**) is frequently used as a biochemical marker for endothelial cells (ECs). Despite this, little is known about the relative level of expression and regulation of this hemostatic factor in ECs in different **vascular** beds in vivo. In the present study, we used quantitative reverse transcription polymerase chain reaction and in situ hybridization analysis to study **vWF** gene expression in murine tissues. Large differences in the level of **vWF** mRNA were observed when comparing highly **vascularized** tissues, with the lung and brain containing 5 to 50 times higher concentrations of **vWF** mRNA than the kidney and liver. In this regard, ECs of small vessels and some microvessels in the lung and brain expressed abundant **vWF** mRNA, whereas ECs of similar sized vessels in the liver and kidney expressed relatively low levels. In general, significantly higher levels of **vWF** mRNA and antigen were demonstrated in ECs of larger vessels compared with microvessels and in venous ECs compared with arterial ECs. Although intraperitoneal administration of endotoxin (or **tumor** necrosis factor-alpha) increased plasma **vWF** levels, it had variable effects on the steady-state level of **vWF** mRNA in murine tissues (ie, it decreased **vWF** mRNA in many tissues, increased it in others, and had little effect on still others). These results indicate that **vWF** is differentially expressed and regulated in ECs present in different tissues and within the same **vascular** bed.


L9 ANSWER 72 OF 215 MEDLINE DUPLICATE 58
ACCESSION NUMBER: 1998293764 MEDLINE
DOCUMENT NUMBER: 98293764 PubMed ID: 9632003
TITLE: Analysis of vascularity of human neurofibromas.
AUTHOR: Arbiser J L; Flynn E; Barnhill R L
CORPORATE SOURCE: Department of Dermatology, Harvard Medical School, Boston, Massachusetts, USA.
CONTRACT NUMBER: RO3AR44947 (NIAMS)
SOURCE: JOURNAL OF THE AMERICAN ACADEMY OF DERMATOLOGY, (1998 Jun) 38 (6 Pt 1) 950-4.
Journal code: HVG; 7907132. ISSN: 0190-9622.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199807
ED Entered STN: 19980716
Last Updated on STN: 19980716

Entered Medline: 19980702

AB BACKGROUND: A common misperception is that the vascularity of a tumor can be determined by its gross appearance. Neurofibromas are grossly white in appearance. The degree of vascularity of neurofibromas has not been determined. OBJECTIVE: The purpose of this study was to determine the extent of neovascularization of neurofibromas. METHODS: Neurofibromas from patients with neurofibromatosis-1 or spontaneous neurofibromas were stained with antibodies against von Willebrand factor (factor VIII-related antigen) and vascular endothelial growth factor (VEGF). RESULTS: Neurofibromas, both spontaneous and congenital, exhibit a high degree of vascularity. In addition, perivascular cells in neurofibromas stain with antibodies to VEGF, an angiogenic factor. CONCLUSION: Neurofibromas, despite their gross appearance, are highly vascular . Their vascularity may be mediated, in part, through the angiogenic factor VEGF.

L9 ANSWER 73 OF 215 MEDLINE DUPLICATE 59
ACCESSION NUMBER: 1998187688 MEDLINE
DOCUMENT NUMBER: 98187688 PubMed ID: 9528839
TITLE: Heterogeneity in microvascular density in lung tumours: comparison with normal bronchus.
AUTHOR: Schor A M; Pazouki S; Morris J; Smither R L; Chandrachud L M; Pendleton N
CORPORATE SOURCE: Cell and Molecular Biology Unit, Dental School, University of Dundee, UK.
SOURCE: BRITISH JOURNAL OF CANCER, (1998 Mar) 77 (6) 946-51. Journal code: AV4; 0370635. ISSN: 0007-0920.
PUB. COUNTRY: SCOTLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199804
ED Entered STN: 19980422
Last Updated on STN: 19980422
Entered Medline: 19980415

AB . . . of angiogenesis and (b) the measurement of MVD in a single block is representative of the overall MVD of the tumour. MVD was quantitated in one block per specimen of 60 lung tumours and nine normal lung tissues, and in 47 blocks taken from different regions of four tumours. Blood vessels were stained with antibody to von Willebrand Factor and MVD was quantitated using two methods: average density throughout the section (a-MVD) and density in the most vascularized area or 'hot spot' (h-MVD). Similar h-MVD values were found in tumours and in normal bronchus, whereas a-MVD was greater in the latter ($P < 0.01$). When 47 blocks from four tumours were analysed, inter-tumour variation was significant ($P < 0.001$) in spite of significant intra-tumour variation. The highest MVD value was not necessarily found in the periphery of the tumour. The four tumours were ranked into either two or four tiers according to their overall MVD. In 50 random selections of one block per tumour, the correct ranking was achieved in 68-74% of cases with the two-tier ranking and in 6-16% of cases with the. . . suggest that elevated MVD values do not necessarily represent angiogenesis in non-small cell lung carcinomas. When only one block per tumour is examined, the chance of obtaining an accurate estimate of the vascularity of that tumour may be lower than 68%.

L9 ANSWER 74 OF 215 MEDLINE DUPLICATE 60
ACCESSION NUMBER: 1999198826 MEDLINE
DOCUMENT NUMBER: 99198826 PubMed ID: 10100727
TITLE: Assessment of vascularity in histological sections: effects of methodology and value as an index of angiogenesis in breast tumours.
AUTHOR: Schor A M; Pendleton N; Pazouki S; Smither R L; Morris J; Lessan K; Heerkens E; Chandrachud L M; Carmichael G; Adi M; Chisholm D M; Stevenson H
CORPORATE SOURCE: Oral Diseases Group, Dental School, University of Dundee, UK.
SOURCE: HISTOCHEMICAL JOURNAL, (1998 Dec) 30 (12) 849-56. Journal code: G9A; 0163161. ISSN: 0018-2214.
PUB. COUNTRY: ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199905
ED Entered STN: 19990517
Last Updated on STN: 20000303
Entered Medline: 19990505

AB The aims of this study were to (a) determine how the quantification of blood vessels in histological sections (vascularity) is affected by the methodology used and (b) assess the value of vascularity as an index of angiogenesis by comparing tumour and normal breast tissue. Archival specimens of breast, lung and oral carcinoma, oral dysplasia and normal breast tissue were used to test the effects of the following experimental variables on vascularity: pretreatment of the sections (enzymatic digestion, heating), endothelial markers (von Willebrand factor and CD31 antibodies), method of quantification (highest microvascular density, average microvascular density and microvascular volume) and interobserver variations. All the variables examined significantly affected the estimated vascularity; this depended on the type of tissue and method used. The pretreatment of the sections before staining was the most important variable, altering the vascularity ranking of the tumours. Vascularity in breast tumours was similar to that of the normal breast intralobular stroma, suggesting that an area of high microvascular density in the tumour does not necessarily represent tumour -induced angiogenesis. Contradictory results have been published regarding the value of vascularity as a tumour prognostic factor. Our results suggest that statistically significant differences in vascularity values are most likely to arise from failure to optimize the staining protocol and from the method used to assess vascularity.

L9 ANSWER 75 OF 215 MEDLINE DUPLICATE 61
ACCESSION NUMBER: 1999079413 MEDLINE
DOCUMENT NUMBER: 99079413 PubMed ID: 9863709
TITLE: In-vitro effect of oncostatin M on the release by endothelial cells of von Willebrand factor, tissue-type plasminogen activator and plasminogen activator inhibitor-1.
AUTHOR: Pourtau J; Soria C; Paysant J; Vannier J P; Vasse M
CORPORATE SOURCE: DIFEMA, Faculte de Medecine et de Pharmacie de Rouen, Saint

Etienne du Rouvray, France.
SOURCE: BLOOD COAGULATION AND FIBRINOLYSIS, (1998 Oct) 9 (7) 609-15.
Journal code: A5J; 9102551. ISSN: 0957-5235.
PUB. COUNTRY: ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199903
ED Entered STN: 19990316
Last Updated on STN: 19990316
Entered Medline: 19990303

AB Epidemiological studies have demonstrated that levels of plasma fibrinogen, von **Willebrand** factor (**vWf**), plasminogen activator inhibitor-1 (PAI-1) and tissue-type plasminogen activator (tPA) are associated with the incidence of **vascular** disease. Since oncostatin M dramatically induces fibrinogen biosynthesis by hepatocytes and could be implicated in **vascular** injury leading to atherosclerosis, we have analyzed the effect of oncostatin M on PAI-1, **vWf** and tPA secretion by endothelial cells. A 2-h incubation of human umbilical vein endothelial cells with oncostatin M increases thrombin-induced secretion of **vWf** to the same extent as **tumour** necrosis factor-alpha or interleukin-1 (137+/-26% of control for 5 ng/ml oncostatin M, P < 0.001, n=5). The effects on tPA. . . secretion. This observation of the effects of oncostatin M on both macro- and microvasculature could explain the increased levels of **vWf**, PAI-1 and tPA in the plasma of atherosclerotic subjects identified in epidemiological studies, suggesting that oncostatin M could play a. . .

L9 ANSWER 76 OF 215 MEDLINE DUPLICATE 62
ACCESSION NUMBER: 1999197894 MEDLINE
DOCUMENT NUMBER: 99197894 PubMed ID: 10097821
TITLE: Thrombotic thrombocytopenic purpura: diagnosis, pathogenesis and modern therapy.
AUTHOR: Eldor A
CORPORATE SOURCE: Institute of Hematology, Tel-Aviv Sourasky Medical Center, Israel.
SOURCE: BAILLIERES CLINICAL HAEMATOLOGY, (1998 Jun) 11 (2) 475-95.
Ref: 115
Journal code: BCH; 8800474. ISSN: 0950-3536.
PUB. COUNTRY: ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199906
ED Entered STN: 19990628
Last Updated on STN: 19990628
Entered Medline: 19990615

AB Thrombotic thrombocytopenic purpura (TTP) is an uncommon multisystem disorder, sometimes associated with predisposing conditions such as pregnancy, **cancer**, exposure to certain drugs, bone marrow transplantation and HIV-1 infection. An abnormal interaction between the **vascular** endothelium and platelets which occurs in certain organs leads to thrombosis, endothelial proliferation, minimal inflammation and micro-angiopathic haemolysis. Recent studies. . . cell perturbation and apoptosis caused by an as yet unknown plasma factor(s) may lead to the release of abnormal von **Willebrand** factor which facilitates the deposition of platelet microthrombi. Exchange transfusions of plasma or plasma-cryosupernatant remain the cornerstone of the treatment. . .

L9 ANSWER 77 OF 215 MEDLINE DUPLICATE 63
ACCESSION NUMBER: 1998299338 MEDLINE
DOCUMENT NUMBER: 98299338 PubMed ID: 9637268
TITLE: Immunohistochemical determination of tumor angiogenesis measured by the maximal microvessel density in human prostate cancer.
AUTHOR: Offersen B V; Borre M; Overgaard J
CORPORATE SOURCE: Danish Cancer Society, Department of Experimental Clinical Oncology, Aarhus University Hospital.
SOURCE: APMIS, (1998 Apr) 106 (4) 463-9.
Journal code: AMS; 8803400. ISSN: 0903-4641.
PUB. COUNTRY: Denmark
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199806
ED Entered STN: 19980708
Last Updated on STN: 19980708
Entered Medline: 19980625

AB **Tumor** growth beyond a certain size requires angiogenesis. Experimental evidence shows that once **tumors** leave the pre-angiogenic phenotype to become angiogenic, metastases often start to evolve. The aim of this study was to develop a reproducible immunohistochemical technique and method to characterize the neovascularization in archival prostate **cancer** tissue by quantifying the microvessel density (MVD). Archival **tumor** specimens from 64 consecutively diagnosed prostate **cancer** patients were immunostained for von **Willebrand** Factor ( **vWF**), endothelial antigen and for CD31 combined with the use of different digestive enzymes (trypsin and pronase) and heating in a. . . the maximal MVD, and clinical characteristics were correlated with the crude survival of the patient population. The immunohistochemical staining for **vWF** to measure the maximal MVD was found to be a reproducible method of characterizing the individual **tumor**. Both a univariate and a multivariate analysis demonstrated that the maximal MVD, in contrast to the mean MVD, was significantly associated with survival in prostate **cancer** patients. We conclude that evaluation of angiogenesis by immunostaining the endothelial cells for **vWF** measured by the MVD in the most **vascularized** areas of the **tumor** is a reproducible method of characterizing the individual prostate **tumor**. Maximal MVD proved to be an independent prognostic parameter useful in conjunction with other known prognostic markers in human prostate **cancer**.

L9 ANSWER 78 OF 215 MEDLINE DUPLICATE 64
ACCESSION NUMBER: 1999065113 MEDLINE
DOCUMENT NUMBER: 99065113 PubMed ID: 9849861
TITLE: Changes in VEGF expression and in the vasculature during the growth of early-stage ethylnitrosourea-induced malignant astrocytomas in rats.

AUTHOR: Yoshimura F; Kaidoh T; Inokuchi T; Shigemori M
CORPORATE SOURCE: Department of Neurosurgery, Kurume University School of Medicine, Japan.
SOURCE: VIRCHOWS ARCHIV, (1998 Nov) 433 (5) 457-63. Journal code: BZD; 9423843. ISSN: 0945-6317.
PUB. COUNTRY: GERMANY: Germany, Federal Republic of
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199812
ED Entered STN: 19990115
Last Updated on STN: 19990115
Entered Medline: 19981229

AB **Vascular** endothelial growth factor (VEGF), a potent angiogenic and **vascular** permeability factor, may be important as a mediator of brain **tumour** progression. However, it is still not clear whether VEGF plays a causative role in the early stage of glioma development. We investigated the relationship between VEGF protein expression (as assayed by immunohistochemistry) and different morphological parameters reflecting **tumour** progression ( **tumour** diameter, **vascular** density and **vascular** diameter) in **tumours** at various stages. As a **tumour** model, ethylnitrosourea (ENU)-induced rat malignant astrocytoma was used. **Tumours** were classified by size and level of **vascularity** estimated by the von **Willebrand** factor (vWF) staining. **Tumours** less than 10 mm in diameter were designated early stage neoplastic lesions. All 34 early astroglial **tumours** were found to be VEGF positive. Increase in the VEGF immunopositive rate of **tumour** cells correlated significantly with increase in **vascular** density and **vascular** diameter. We suggest that VEGF induces angiogenesis and growth of microvessels, promoting growth of the early stage malignant astrocytoma.

L9 ANSWER 79 OF 215 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 1998:474766 BIOSIS
DOCUMENT NUMBER: PREV199800474766
TITLE: Antepartum fetal intracranial hemorrhage, predisposing factors and prenatal sonography: A review.
AUTHOR(S): Sherer, David M. (1); Anyaegbunam, Akolisa; Onyeije, Chukwuma
CORPORATE SOURCE: (1) Div. Maternal-Fetal Med., Dep. Obstet. Gynecol. Women's Health, Montefiore Med. Cent., Albert Einstein Coll. Med., 1825 Eastchester Road, Room 703, Bronx, NY 10461 USA
SOURCE: American Journal of Perinatology, (July, 1998) Vol. 15, No. 7, pp. 431-441. ISSN: 0735-1631.
DOCUMENT TYPE: General Review
LANGUAGE: English
IT . . .
Medical Sciences)
IT Diseases
alloimmune thrombocytopenia: blood and lymphatic disease, predisposing maternal condition; antepartum fetal intracranial hemorrhage: nervous system disease, **vascular** disease; cholestasis of pregnancy: digestive system disease; congenital factor-V deficiency: metabolic disease, predisposing fetal condition; congenital factor-X deficiency: metabolic disease, predisposing fetal condition; congenital **tumor** hemorrhage: congenital disease, predisposing fetal condition, neoplastic disease, **vascular** disease; febrile disease: disease-miscellaneous; fetal injury: injury; idiopathic thrombocytopenia: blood and lymphatic disease, predisposing maternal condition; illicit cocaine abuse: behavioral and mental disorders, predisposing maternal condition; severe abdomimal trauma: injury, predisposing maternal condition; von **Willebrand**'s disease: blood and lymphatic disease, maternal condition, predisposing maternal conditions; wafarin abuse: behavioral and mental disorders, predisposing maternal condition

L9 ANSWER 80 OF 215 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 1998:406965 BIOSIS
DOCUMENT NUMBER: PREV199800406965
TITLE: A poorly-differentiated hepatic haemangiosarcoma in an Amazona farinosa parrot.
AUTHOR(S): Rossi, G. (1)
CORPORATE SOURCE: (1) Dip. Patol. Anim. Profilassi Igiene degli Alimenti, Fac. Med. Vet., Univ. Pisa, Viale delle Piagga, 2-56100 Pisa Italy
SOURCE: Avian Pathology, (Aug., 1998) Vol. 27, No. 4, pp. 427-430. ISSN: 0307-9457.
DOCUMENT TYPE: Article
LANGUAGE: English
SUMMARY LANGUAGE: English; French; German; Spanish
AB. . . for problems of feather loss and psychogenic pruritus. Histologically, the neoplasm was characterized by two components; angiomatous areas showing irregular **vascular** channels and solid, poorly-differentiated areas, showing sheets of spindle-shaped or undifferentiated cells interposed with necrotic material. Immunohistochemical techniques with different **tumour** markers were applied in order to determine the histogenesis of the **tumour** cells and their positive immunoreaction to vimentin and Von **Willebrand** Factor (Factor VIII), considered a specific marker for endothelial **tumours**, confirmed the diagnosis of haemangiosarcoma. The author suggests a possible hormone-dependent origin of this hepatic **vascular** **tumour**.

L9 ANSWER 81 OF 215 MEDLINE DUPLICATE 65
ACCESSION NUMBER: 1999046278 MEDLINE
DOCUMENT NUMBER: 99046278 PubMed ID: 9828838
TITLE: Invasive lobular and invasive ductal carcinoma of the breast show distinct patterns of vascular endothelial growth factor expression and angiogenesis.
AUTHOR: Lee A H; Dublin E A; Bobrow L G; Poulsom R
CORPORATE SOURCE: Hedley Atkins Pathology Laboratory, Imperial Cancer Research Fund Clinical Oncology Unit, Guy's Hospital, London, U.K.
SOURCE: JOURNAL OF PATHOLOGY, (1998 Aug) 185 (4) 394-401. Journal code: JLB; 0204634. ISSN: 0022-3417.
PUB. COUNTRY: ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199812
ED Entered STN: 19990115

Last Updated on STN: 19990115
Entered Medline: 19981204

AB Angiogenesis is essential for **tumour** growth and important in **tumour** metastasis and prognosis. **Vascular** endothelial growth factor (VEGF) stimulates endothelial proliferation in vitro and angiogenesis in vivo. VEGF expression has been correlated with high **vascularity** in **tumours**, including carcinoma of the breast. This study investigated VEGF expression and **vascularity** of invasive lobular (n = 10) and invasive ductal carcinoma (n = 28), and pure ductal carcinoma in situ of the breast (n = 33). VEGF protein expression was studied with immunohistochemistry and VEGF mRNA with in situ hybridization. **Vascular** density was assessed on sections stained for von **Willebrand** factor. There was more expression of both VEGF protein (P = 0.006) and mRNA (P = 0.002) in invasive ductal. . . lobular carcinoma. VEGF protein (rs = 0.32, P = 0.047) and mRNA (rs = 0.56, P = 0.04) correlated with **vascular** density in invasive ductal carcinoma. In invasive lobular carcinoma, **vascular** density did not correlate with VEGF mRNA (rs = 0.15, P = 0.35) and was inversely related to VEGF protein (rs = -0.57, P = 0.04). There were no significant differences in **vascular** density between the two types of invasive carcinoma, suggesting that VEGF is important in angiogenesis in invasive ductal carcinoma, but. . .

L9 ANSWER 82 OF 215 MEDLINE DUPLICATE 66
ACCESSION NUMBER: 1999224814 MEDLINE
DOCUMENT NUMBER: 99224814 PubMed ID: 10210108
TITLE: Angiogenesis in endometrial cancer.
AUTHOR: Mazurek A; Telego M; Pierzynski P; Lapuc G; Niklinska W; Juczewska M; Chyczewski L
CORPORATE SOURCE: Institute of Obstetrics and Gynecology, Medical University of Bialystok, Poland.
SOURCE: NEOPLASMA, (1998) 45 (6) 360-4.
Journal code: NVO; 0377266. ISSN: 0028-2685.
PUB. COUNTRY: Czech Republic
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199904
ED Entered STN: 19990517
Last Updated on STN: 19990517
Entered Medline: 19990430

AB We evaluated the level of angiogenesis in endometrial adenocarcinoma and investigated the relationship between **tumor vascularity** and clinicopathological parameters. The level of angiogenesis in noninvaded uterine smooth muscle was also studied. Angiogenesis was studied in uteri of 29 post-menopausal women operated on for endometrial **cancer**. DAKO EPOS Anti-Human von **Willebrand** Factor/HRP antibodies were applied to mark endothelial cells. Both vessels and endothelial cells were counted on a light microscope equipped. . . The highest density of vessels and endothelial cells was found in disease-free uterine smooth muscle tissue situated distant to the **tumor**. Density of vessels and endothelial cell counts were higher in the outer as compared to the central parts of the **tumor**. We found statistically significant differences in total angiogenic points' density between groups of various clinical FIGO staging, specifically between Ia. . . of endothelial cells and the density of vessels with viable lumen (counts/sq. mm calculated from the central parts of the **tumor**). These results suggest that the analysis of angiogenesis may be a useful biologic parameter and additional study of neovascularization in endometrial **cancer** is warranted.

L9 ANSWER 83 OF 215 MEDLINE DUPLICATE 67
ACCESSION NUMBER: 1998250386 MEDLINE
DOCUMENT NUMBER: 98250386 PubMed ID: 9590504
TITLE: A simplified method for growth of human microvascular endothelial cells results in decreased senescence and continued responsiveness to cytokines and growth factors.
AUTHOR: Kraling B M; Bischoff J
CORPORATE SOURCE: Children's Hospital and Department of Surgery, Harvard Medical School, Boston, Massachusetts 02115, USA.
CONTRACT NUMBER: P01 CA 45548 (NCI)
R29 GM 46757 (NIGMS)
SOURCE: IN VITRO CELLULAR AND DEVELOPMENTAL BIOLOGY. ANIMAL, (1998 Apr) 34 (4) 308-15.
Journal code: BZE; 9418515. ISSN: 1071-2690.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199806
ED Entered STN: 19980708
Last Updated on STN: 19980708
Entered Medline: 19980625

AB . . . ng/ml basic fibroblast growth factor and analyzed over 3 mo. The human microvascular endothelial cells expressed the endothelial markers von **Willebrand** factor, CD31, P-selectin, and E-selectin. In addition, the cells showed increased proliferation in the presence of basic fibroblast growth factor (0.5 ng/ml) or **vascular** endothelial cell growth factor (10 ng/ml). **Tumor** necrosis factor-alpha-induced expression of E-selectin was similar in cells at Passages 3, 6, and 12, indicating that the cells maintained. . .

L9 ANSWER 84 OF 215 MEDLINE
ACCESSION NUMBER: 1998285862 MEDLINE
DOCUMENT NUMBER: 98285862 PubMed ID: 9620893
TITLE: POEMS syndrome with vascular lesions and renal carcinoma - possible role of cytokines.
AUTHOR: Pasqui A L; Bova G; Saletti M; Bruni F; Di Renzo M; Auteri A
CORPORATE SOURCE: U.O. Immunologia Clinica, Policlinico Le Scotte , I-53100 Siena, Italy.. defranco@unisi.it
SOURCE: EUROPEAN JOURNAL OF MEDICAL RESEARCH, (1998 Jun 17) 3 (6) 304-6.
Journal code: COQ; 9517857. ISSN: 0949-2321.
PUB. COUNTRY: GERMANY: Germany, Federal Republic of
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199808
ED Entered STN: 19980903
Last Updated on STN: 19980903
Entered Medline: 19980824

AB We describe here the case of a 60 years man with POEMS syndrome associated

with renal tumor and vascular lesions. The patient had osteosclerotic myeloma IgA-lambda, polyneuropathy, endocrinopathy and skin changes. In addition, he developed renal clear cell carcinoma. . . . limbs. The humoral study showed thrombocytosis, high levels of IL-1beta and IL-6 and of some coagulative/fibrinolytic and endothelial factors (von Willebrand factor, plasmin-antiplasmine complexes, plasminogen activator). We suggest the hypothesis that these factors are capable of determining some manifestations of POEMS. . .

L9 ANSWER 85 OF 215 MEDLINE DUPLICATE 68
ACCESSION NUMBER: 1998127686 MEDLINE
DOCUMENT NUMBER: 98127686 PubMed ID: 9468168
TITLE: Increased plasma von Willebrand factor in the systemic inflammatory response syndrome is derived from generalized endothelial cell activation.
AUTHOR: McGill S N; Ahmed N A; Christou N V
CORPORATE SOURCE: Queen's University, Kingston, ON, Canada.
SOURCE: CRITICAL CARE MEDICINE, (1998 Feb) 26 (2) 296-300. Journal code: DTF; 0355501. ISSN: 0090-3493.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 199802
ED Entered STN: 19980306
Last Updated on STN: 19980306
Entered Medline: 19980226

AB OBJECTIVES: Von Willebrand factor antigen (vWf) is an essential hemostatic protein. Increased plasma levels have been documented in patients suffering from the systemic inflammatory response syndrome. . . of injury. We hypothesize that increased plasma levels result from systemic endothelial cell activation and degranulation. DESIGN: We compared immunohistochemical vWf staining in dermal biopsy specimens from patients with SIRS to healthy control subjects in the presence and absence of recombinant human tumor necrosis factor (rhTNF)-alpha. Also, we quantified plasma levels of vWf in these groups using a newly available antibody. SETTING: A tertiary care surgical intensive care unit in a university teaching. . . . SIRS and healthy controls. INTERVENTIONS: Biopsies and blood samples were obtained from study groups. MEASUREMENTS AND MAIN RESULTS: Decreased baseline vWf staining was noted in SIRS patients. The rhTNF-alpha caused a statistically significant decrease in vWf staining in control subjects but not in SIRS patients. Plasma vWf levels were increased an average of 11-fold in SIRS patients compared with control subjects. CONCLUSION: We postulate that the increased plasma levels of vWf and the decreased staining in the peripheral dermal plexus represent the generalized activation and degranulation of endothelium in vascular beds remote from the original inflammatory focus.

L9 ANSWER 86 OF 215 MEDLINE DUPLICATE 69
ACCESSION NUMBER: 1998355583 MEDLINE
DOCUMENT NUMBER: 98355583 PubMed ID: 9692834
TITLE: Hepatocyte growth factor/scatter factor and its receptor c-Met are overexpressed and associated with an increased microvessel density in malignant pleural mesothelioma.
AUTHOR: Tolnay E; Kuhnen C; Wiethege T; Konig J E; Voss B; Muller K M
CORPORATE SOURCE: Department of Pulmonology, Semmelweis Medical School, Budapest, Hungary.
SOURCE: JOURNAL OF CANCER RESEARCH AND CLINICAL ONCOLOGY, (1998) 124 (6) 291-6. Journal code: HL5; 7902060. ISSN: 0171-5216.
PUB. COUNTRY: GERMANY: Germany, Federal Republic of
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199808
ED Entered STN: 19980828
Last Updated on STN: 20000303
Entered Medline: 19980817

AB . . . induces angiogenesis, promoting endothelial cell migration and capillary-tube formation in vivo. Co-expression of HGF/SF and c-Met receptor results in enhanced tumour growth, invasiveness and a mesenchymal-epithelial transition in some experimental tumours. Since mesothelioma cells have been reported to express c-Met receptor and to migrate in response to HGF/SF, we investigated human. . . pleural mesotheliomas for the demonstration of possible co-expression of the growth factor and its receptor. The microvessel density of the tumours was also analysed in order to assess the influence of HGF/SF expression on tumour angiogenesis. Thirty-nine paraffin-embedded specimens of malignant pleural mesotheliomas were immunostained by anti-HGF/SF and anti-c-Met antibodies and semiquantitatively evaluated. c-Met mRNA expression was visualised in ten tumour samples by a fluorescent in situ hybridisation method. Microvessel density was calculated by counting microvessels with a high-power field (200x) on von-Willebrand-factor-stained slides. We found an increased production of HGF/SF in 33/39 tumours and a corresponding overexpression of c-Met receptor in 29/39 specimens. The FISH method detected increased transcription of c-Met mRNA in malignant cells and in neighbouring vascular endothelial cells. HGF/SF-positive mesotheliomas had significantly higher microvessel densities compared to their HGF/SF-negative counterparts. The observed co-expression of HGF/SF and c-Met in malignant pleural mesotheliomas suggests a possible self-stimulation (autocrine loop) of tumour cells. On the basis of the significantly higher microvessel density values of malignant mesotheliomas overexpressing HGF/SF, we postulate, that HGF/SF may be an additional relevant factor in tumour angiogenesis in malignant pleural mesotheliomas.

L9 ANSWER 87 OF 215 CAPLUS COPYRIGHT 2001 ACS DUPLICATE 70
ACCESSION NUMBER: 1998:371050 CAPLUS
DOCUMENT NUMBER: 129:94027
TITLE: Regional administration of recombinant tumor necrosis factor-.alpha. in cancer, with special reference to melanoma
AUTHOR(S): Lejeune, Ferdy; Lienard, Danielle; Eggermont, Alexander
CORPORATE SOURCE: Multidisciplinary Oncology Centre, Lausanne University Hospital, CHU Vaudois, Lausanne, Switz.
SOURCE: BioDrugs (1998), 9(3), 211-218
CODEN: BIDRF4; ISSN: 1173-8804
PUBLISHER: Adis International Ltd.
DOCUMENT TYPE: Journal; General Review

LANGUAGE: English
AB A review with 41 refs. Recombinant tumor necrosis factor-.alpha. (rTNF.alpha.) possesses the unique property of activating and selectively destroying the tumor-assocd. microvasculature. Systemic application of rTNF.alpha. has shown that the max. tolerated dose (MTD) is 10 times lower than the efficient dose in animals. The main toxicity corresponds to the systemic inflammatory response syndrome (SIRS), with a decrease of vascular resistance and hypotension. We found that it is possible to administer rTNF.alpha. at 10 times the MTD in an isolated limb perfusion system, using a heart-lung machine, for advanced melanoma and sarcoma of the limbs. Our results, using the combination of high dose rTNF.alpha., interferon-.gamma. and melphalan (TIM), produced an overall objective response rate of 100% in 2 successive studies on melanoma, with 90% and 78% complete response, resp. In sarcoma, there was an overall response rate of 64%, with 36% complete response. Angiog. and immunohistol. studies demonstrated selective and early damage of the tumor-assocd. microvasculature, preceded by upregulation of adhesion mols. and intratumoral leak of von Willebrand factor. Tumor invasion by platelets and, in some cases, by polymorphonuclear cells, appeared within hours after the application of rTNF.alpha., long before the lysis of the tumor. Systemic changes after rTNF.alpha. treatment included the prodn. of sol. TNF.alpha. receptors and of interleukin-6. A typical acute phase reaction was obsd. within 3 days, with increase of C-reactive protein parallelled by an increase of tenascin-C. A selective effect on intratumoral endothelial cells seems to be involved in the mechanism of the impressive antitumor effect of rTNF.alpha., but the role of acute phase protein prodn. is not fully understood. In selected cases of melanoma, specific cytotoxic T lymphocytes were increased after perfusion.

L9 ANSWER 88 OF 215 MEDLINE DUPLICATE 71
ACCESSION NUMBER: 1998348674 MEDLINE
DOCUMENT NUMBER: 98348674 PubMed ID: 9684049
TITLE: Blood vessel density in canine osteosarcoma.
AUTHOR: Coomber B L; Denton J; Sylvestre A; Kruth S
CORPORATE SOURCE: Department of Biomedical Sciences, Ontario Veterinary College, University of Guelph.
SOURCE: CANADIAN JOURNAL OF VETERINARY RESEARCH, (1998 Jul) 62 (3) 199-204.
Journal code: CKL; 8607793. ISSN: 0830-9000.
PUB. COUNTRY: Canada
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199810
ED Entered STN: 19981029
Last Updated on STN: 19981029
Entered Medline: 19981016
AB . . . prevalent bone neoplasm which has similarities to the human disease. We used a retrospective study to investigate the possibility that tumor vascularity may provide useful prognostic information, indicative of the role of this parameter in progression of this cancer. We quantified microvessel density in 52 histological specimens of primary tumor, immunostained for von Willebrand's Factor to identify vascular endothelium. For the 20 cases not euthanized at presentation or lost to follow-up, we found significantly higher tumor microvascular densities in animals presenting with detectable pulmonary metastases (5 of 20), and significantly lower densities in animals without metastatic. . . 20; P < 0.05). Animals with no evidence of pulmonary metastases at time of death (8 of 20) had intermediate vascular densities in their tumors. The results of this preliminary study suggest that vascularity of the primary tumor may be an indication of tumor progression. Future studies with a larger number of cases should establish whether vascular density can be a useful prognostic parameter for canine osteosarcoma.

L9 ANSWER 89 OF 215 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 1998193141 EMBASE
TITLE: Multi-focal, multi-centric angiosarcoma of bone.
AUTHOR: Kakouri E.; Whelan J.S.; Coltart S.; Smith M.E.F.; Souhami R.L.
CORPORATE SOURCE: J.S. Whelan, London Soft Tissue/Bone Tumour Svc., Meyerstein Institute of Oncology, Middlesex Hospital, Mortimer Street, London W1N 8AA, United Kingdom. j.whelan@ucl.ac.uk
SOURCE: Sarcoma, (1998) 1/3-4 (183-187).
Refs: 22
ISSN: 1357-714X CODEN: SARCFO
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 016 Cancer
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English
AB A multi-focal multi-centric, malignant tumour of vascular origin arising in bone in a 55-year-old man is described. The presenting symptoms were pain and weight loss. Radiologically, multiple. . . pelvis. Histological examination demonstrated an angiosarcoma which was predominantly low grade in nature but with focal areas of intermediate grade. Tumour cells expressed the endothelial markers CD31, CD34 and von Willebrand's factor. There was rapid radiological progression of disease with no response to radiotherapy. Pain abated within a few days of. . .

L9 ANSWER 90 OF 215 MEDLINE DUPLICATE 72
ACCESSION NUMBER: 1998118595 MEDLINE
DOCUMENT NUMBER: 98118595 PubMed ID: 9457269
TITLE: Stromal angiogenesis in human glioma: a role of platelet-derived endothelial cell growth factor.
AUTHOR: Nakayama Y; Sueishi K; Oka K; Kono S; Tomonaga M
CORPORATE SOURCE: Department of Neurosurgery, School of Medicine, Fukuoka University, Japan.
SOURCE: SURGICAL NEUROLOGY, (1998 Feb) 49 (2) 181-7; discussion 187-8.
Journal code: VBJ; 0367070. ISSN: 0090-3019.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199802
ED Entered STN: 19980226
Last Updated on STN: 19980226

Entered Medline: 19980213

AB BACKGROUND: Although several tumor angiogenic factors have been identified previously and characterized, it is not yet fully clear how tumor angiogenic factors induce endothelial cell transformation and proliferation. Platelet-derived endothelial cell growth factor (PD-ECGF) has been recently discovered to be. . . from human platelets. However, there has been no previous report describing the significance of PD-ECGF in the growth of brain tumors by angiogenic stimulation. We report the immunohistochemical localization of PD-ECGF in human gliomas and meningiomas, and discuss whether PD-ECGF could. . . Numerous PD-ECGF positive cells were observed within and around the blood vessels of glioblastoma multiforme, especially on the borders of tumor tissue. The PD-ECGF positive cells were negative for anti-von Willebrand factor (vWF) and antiglial fibrillary acidic protein (GFAP) antibodies and were positive for antimacrophage (HAM-56). The expression of PD-ECGF by macrophages closely correlated with the degree of stromal vascularity in glioblastoma multiforme; no such correlation was found in either astrocytoma or meningioma. Proliferating cell nuclear antigen (PCNA) was found. . .

L9 ANSWER 91 OF 215 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1998:87364 CAPLUS
DOCUMENT NUMBER: 128:165693
TITLE: Preferential adhesion of prostate cancer cells to a human bone marrow endothelial cell line
AUTHOR(S): Lehr, Jeffrey E.; Pienta, Kenneth J.
CORPORATE SOURCE: Division of Hematology/Oncology, Department of Internal Medicine and Section of Urology, Department of Surgery, University of Michigan Comprehensive Cancer Center, University of Michigan, Ann Arbor, MI, USA
SOURCE: J. Natl. Cancer Inst. (1998), 90(2), 118-123
CODEN: JNCIEQ; ISSN: 0027-8874
PUBLISHER: Oxford University Press
DOCUMENT TYPE: Journal
LANGUAGE: English
IT Vascular endothelium
(bone marrow sinusoidal; preferential adhesion of prostate cancer cells to human bone marrow endothelial cell line in relation to von Willebrand factor, galectin-3, and LFA-1)

L9 ANSWER 92 OF 215 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 1999:87735 BIOSIS
DOCUMENT NUMBER: PREV199900087735
TITLE: Generation of endothelial-like cells from peripheral blood mononuclear cells and CD14-positive monocytes.
AUTHOR(S): Gehling, Ursula M.; Lindemann, Katharina; Weidner, Natalja; Adamkiewicz, Juergen; Mueller, Rolf; Lucibello, Frances C.; Havemann, Klaus
CORPORATE SOURCE: Inst. Mol. Biol. Tumor Res., Univ. Marburg, Mannkopff-Strasse, 35033 Marburg Germany
SOURCE: Annals of Hematology, (1998) Vol. 77, No. SUPPL. 2, pp. S114.
Meeting Info.: Annual Congress of the German and Austrian Societies of Hematology and Oncology Frankfurt, Germany October 25-28, 1998 Austrian Society of Hematology and Oncology
. ISSN: 0939-5555.
DOCUMENT TYPE: Conference
LANGUAGE: English
IT . . .
monocytes: blood and lymphatics, immune system
IT Chemicals & Biochemicals
angiotensin converting enzyme: expression; integrin alpha v/beta 3: expression; von Willebrand factor: expression; B7-2: expression; CD36: expression; HLA-DR: expression; ICAM-1 [intercellular adhesion molecule-1]: expression; TNF alpha [tumor necrosis factor alpha]; VE-cadherin: expression; VEGF [vascular endothelial growth factor]

L9 ANSWER 93 OF 215 MEDLINE
ACCESSION NUMBER: 1998249672 MEDLINE
DOCUMENT NUMBER: 98249672 PubMed ID: 9588073
TITLE: [Vascular endothelium as a factor in information transfer between the cardiovascular and immune systems].
Cievny endotel ako operator prenosu informacii medzi kardiovaskularnym a imunitnym systemom.
AUTHOR: Stvrtinova V; Ferencik M; Hulin I; Jahnova E
CORPORATE SOURCE: II. interna klinika Lekarskej fakulty Univerzity Komenskeho v Bratislave.
SOURCE: BRATISLAVSKE LEKARSKE LISTY, (1998 Jan) 99 (1) 5-19. Ref: 89
Journal code: B5N; 0065324. ISSN: 0006-9248.
PUB. COUNTRY: Slovakia
Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, ACADEMIC)
LANGUAGE: Slovak
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199806
ED Entered STN: 19980625
Last Updated on STN: 19980625
Entered Medline: 19980617

AB In health, the vascular endothelium forms a multifunctional interface between the circulating blood and various tissues and organs of the body. It constitutes a. . . H2 and components of the renin angiotensin system), various pro- and antithrombotic factors (e.g. tissue factor, platelet activating factor--PAF, von Willebrand factor), fibrinolytic activators and inhibitors (e.g. tissue plasminogen activator, plasminogen activator inhibitor-1), potent arachidonate metabolites (prostanoids), leukocyte adhesion molecules (e.g. E-selectin, P-selectin, intercellular adhesion molecule-1--ICAM-1, vascular cell adhesion molecule-1--VCAM-1), and multiple cytokines with activities of growth stimulators and inhibitors, transforming growth factors, proinflammatory and antiinflammatory mediators, tumour necrosis factors and chemotactic factors (chemokines). Besides these essential activities controlling the cardiovascular system, the endothelial cells represent an important. . .

L9 ANSWER 94 OF 215 MEDLINE DUPLICATE 73
ACCESSION NUMBER: 1998233451 MEDLINE
DOCUMENT NUMBER: 98233451 PubMed ID: 9570915
TITLE: A simple immunomagnetic protocol for the selective

isolation and long-term culture of human dermal microvascular endothelial cells.
AUTHOR: Richard L; Velasco P; Detmar M
CORPORATE SOURCE: Cutaneous Biology Research Center, Massachusetts General Hospital, Boston, USA.
CONTRACT NUMBER: CA69184 (NCI)
SOURCE: EXPERIMENTAL CELL RESEARCH, (1998 Apr 10) 240 (1) 1-6. Journal code: EPB; 0373226. ISSN: 0014-4827.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199805
ED Entered STN: 19980520
Last Updated on STN: 20000505
Entered Medline: 19980514

AB Endothelial cells involved in tumor angiogenesis, wound healing, and inflammation are predominantly of microvascular origin and are functionally distinct from large vessel-derived endothelial cells which have been largely used for in vitro vascular research. To overcome the problems commonly involved in the culture of microvascular endothelial cells, including unreliable isolation techniques and low. . . human dermal microvascular endothelial cells (HDMEC) obtained from neonatal foreskins, based on the transient, endothelial cell-specific induction of E-selection by tumor necrosis factor-alpha (TNF-alpha). Subconfluent primary cultures, consisting of a mixture of endothelial cells, fibroblasts, and keratinocytes, were treated with TNF-alpha. . . . two immunomagnetic purification steps, a homogenous population of HDMEC was obtained which showed typical cobblestone morphology, expressed CD31 and von Willebrand factor, proliferated in response to vascular endothelial growth factor, upregulated the expression of intercellular adhesion molecule-1 and vascular adhesion molecule-1 in response to TNF-alpha, and formed capillary-like tubes in a three-dimensional collagen type I matrix. This simple technique. . .

L9 ANSWER 95 OF 215 MEDLINE DUPLICATE 74
ACCESSION NUMBER: 1998040541 MEDLINE
DOCUMENT NUMBER: 98040541 PubMed ID: 9374385
TITLE: Relationship between vascularity, age and survival in non-small-cell lung cancer.
AUTHOR: Chandrachud L M; Pendleton N; Chisholm D M; Horan M A; Schor A M
CORPORATE SOURCE: Department of Dental Surgery and Periodontology, Dental School, University of Dundee, UK.
SOURCE: BRITISH JOURNAL OF CANCER, (1997) 76 (10) 1367-75. Journal code: AV4; 0370635. ISSN: 0007-0920.
PUB. COUNTRY: SCOTLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199712
ED Entered STN: 19980109
Last Updated on STN: 19980109
Entered Medline: 19971204

AB Lung tumours in the elderly show reduced growth potential; impaired angiogenesis may contribute to this phenomenon. Recent studies have suggested that the angiogenic potential of a tumour may be inferred by the vascularity measured in histological sections. The purpose of this study has been to determine whether vascularity is related to age, survival or other clinical parameters in resected non-small-cell lung cancer (NSCLC). A group of 88 consecutive patients with a follow-up period of at least 5 years was selected. The group exhibited a wide age range (37-78 years) and similar survival characteristics to those of the general NSCLC population. Tumour sections were stained with a pan-endothelial antibody ( vWF) and vascularity was quantitated, without knowledge of the clinical details, by three methods: highest microvascular density; average microvascular density; and average microvascular volume. The results were analysed by non-parametric statistical tests. A correlation was found between all three methods of quantitation. Vascularity was not associated with age, sex, tumour type, stage, volume, size (TNM-T) nodal status (TNM-N) or survival. However, survival time was generally longer for patients with higher vascularity, reaching borderline significance (P = 0.06) for the average microvascular density values. Higher tumour volume (P = 0.02) and stage (P = 0.05) were associated with lower survival times. Using multivariate survival analysis, tumour volume was the only factor related to survival. We conclude that vascularity is not associated with age and has no significant prognostic value in NSCLC.

L9 ANSWER 96 OF 215 MEDLINE DUPLICATE 75
ACCESSION NUMBER: 1998026688 MEDLINE
DOCUMENT NUMBER: 98026688 PubMed ID: 9362365
TITLE: Quantitation of sinusoid-like vessels in hepatocellular carcinoma: its clinical and prognostic significance.
AUTHOR: Tanigawa N; Lu C; Mitsui T; Miura S
CORPORATE SOURCE: Second Department of Surgery, Fukui Medical School, Japan.
SOURCE: HEPATOLOGY, (1997 Nov) 26 (5) 1216-23. Journal code: GBZ; 8302946. ISSN: 0270-9139.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199712
ED Entered STN: 19980109
Last Updated on STN: 19990129
Entered Medline: 19971209

AB Angiogenesis is crucial for tumor growth and metastasis. Hepatocellular carcinoma (HCC) is a typical hypervascular tumor. However, the relationship between tumor vascularity and the outcome of patients with HCC has not been evaluated. To clarify whether tumor angiogenesis is related to the prognosis of patients, immunohistochemical staining, using anti-von Willebrand factor (vWF) and anti-CD34, was applied in resected specimens from 43 cases of HCC. In nonmalignant tissue, staining was confined to vessels in the portal tract and to a few periportal sinusoids with both of the endothelial markers applied. In tumor tissue, however, sinusoid-like vessels reacted intensively with anti-CD34 but not with anti-vWF. The intratumor microvessel density (MVD) highlighted by anti-CD34 was 297 +/- 88 (per 0.74 mm2), which was significantly higher than that highlighted by anti-vWF (4 +/- 7). When only the MVD highlighted by anti-CD34 was analyzed, tumor diameter larger

than 2 cm, poor differentiation (Edmondson's II to IV), and portal invasion were significantly related to the subgroup. . . 290. Overall survival curves of patients with MVD < 290 were better, and these patients were more likely to remain tumor free. Cox hazards model revealed intratumor MVD and Edmondson's grade to be independent prognostic factors for the overall survival of patients. These results demonstrated for the first time that tumor angiogenesis assessed by anti-CD34 was correlated with the outcome of patients with HCC, suggesting a potential role for anti-CD34 in. . .

L9 ANSWER 97 OF 215 MEDLINE DUPLICATE 76
ACCESSION NUMBER: 97380040 MEDLINE
DOCUMENT NUMBER: 97380040 PubMed ID: 9236839
TITLE: Splenic vascular tumors: a histologic, immunophenotypic, and virologic study.
COMMENT: Comment in: Am J Surg Pathol. 2000 Feb;24(2):306-7
AUTHOR: Arber D A; Strickler J G; Chen Y Y; Weiss L M
CORPORATE SOURCE: Division of Pathology, City of Hope National Medical Center, Duarte, CA 91010, USA.
SOURCE: AMERICAN JOURNAL OF SURGICAL PATHOLOGY, (1997 Jul) 21 (7) 827-35.
Journal code: 3YV; 7707904. ISSN: 0147-5185.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199708
ED Entered STN: 19970825
Last Updated on STN: 20000525
Entered Medline: 19970812
AB **Vascular tumors** of the spleen include several different entities, some of which are unique to that organ. Twenty-two such proliferations were studied, including 10 hemangiomas, six littoral cell angiomas, four angiosarcomas, and two hamartomas. The hemangiomas included seven with localized tumors and three with diffuse angiomatosis of the spleen. All cases were studied by paraffin section immunohistochemistry with a large panel. . . and one angiosarcoma was focally keratin positive. All cases reacted for CD31, whereas 20 of 22 were positive for von Willebrand's factor and 19 of 22 were positive for Ulex europeaus. CD34 expression in lining cells was identified in 10 of. . . in any of the cases. These findings suggest that there are distinct immunophenotypic as well as morphologic features of splenic **vascular tumors**. Littoral cell angiomas have a characteristic CD34-/CD68+/CD21+/CD8- immunophenotype and hamartomas have a characteristic CD68-/CD21-/CD8+ phenotype. The frequent CD68 expression in. . .

L9 ANSWER 98 OF 215 MEDLINE DUPLICATE 77
ACCESSION NUMBER: 1998042251 MEDLINE
DOCUMENT NUMBER: 98042251 PubMed ID: 9374838
TITLE: Localization of endothelin-converting enzyme-1 in human kidney.
AUTHOR: Pupilli C; Romagnani P; Lasagni L; Bellini F; Misciglia N; Emoto N; Yanagisawa M; Rizzo M; Mannelli M; Serio M
CORPORATE SOURCE: Department of Clinical Physiopathology, University of Florence, Italy.
SOURCE: AMERICAN JOURNAL OF PHYSIOLOGY, (1997 Nov) 273 (5 Pt 2) F749-56.
Journal code: 3U8; 0370511. ISSN: 0002-9513.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199712
ED Entered STN: 19980109
Last Updated on STN: 20000303
Entered Medline: 19971216
AB The distribution of endothelin-converting enzyme-1 (ECE-1) mRNA and protein was investigated in human kidney excised because of renal **tumors**. ECE-1 immunoreactivity was detected by immunohistochemistry throughout the different areas of the kidney in the **vascular** and tubular structures. In the cortex, ECE-1 immunostaining was present in the endothelial surface of arcuate and interlobular arteries and. . . detected in the outer and inner medullary collecting ducts and thin limbs of Henle's loops. Immunohistochemical detection of the von **Willebrand** factor on adjacent sections confirmed the endothelial nature of the **vascular** cells that exhibited ECE-1 immunostaining. The distribution patterns of ECE-1 mRNA, investigated by in situ hybridization, appeared similar to that obtained by immunohistochemistry in the cortical and medullary **vasculature** and in different portions of the nephron. Northern blot and densitometric analyses demonstrated that ECE-1 mRNA levels were quantitatively similar in both the renal cortex and medulla. These results demonstrate that **vascular** endothelial and tubular epithelial cells in the cortex and medulla of the human kidney synthesize ECE-1, which, in turn, may. . .

L9 ANSWER 99 OF 215 MEDLINE DUPLICATE 78
ACCESSION NUMBER: 97447100 MEDLINE
DOCUMENT NUMBER: 97447100 PubMed ID: 9301551
TITLE: Angiogenesis and inflammation in invasive carcinoma of the breast.
AUTHOR: Lee A H; Happerfield L C; Bobrow L G; Millis R R
CORPORATE SOURCE: Hedley Atkins Pathology Laboratory, Guy's Hospital, London, UK.
SOURCE: JOURNAL OF CLINICAL PATHOLOGY, (1997 Aug) 50 (8) 669-73.
Journal code: HT3; 0376601. ISSN: 0021-9746.
PUB. COUNTRY: ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 199710
ED Entered STN: 19971024
Last Updated on STN: 19971024
Entered Medline: 19971014
AB . . . invasive carcinoma of the breast. METHODS: Sections from 75 invasive carcinomas of the breast were stained using immunohistochemistry for von **Willebrand** factor, CD3, CD8, CD45RO, CD45RA, CD20, CD68, and c-erbB-2. **Tumour vascularity** was assessed by counting vessels in the three most **vascular** areas, and calculating the average (x 400 magnification, field 0.168 mm2). Each pattern of inflammation was scored semiquantitatively. RESULTS: The. . . edge of the carcinomas, but were less prominent than the diffuse

inflammation. Diffuse inflammation, particularly macrophages, was associated with high tumour grade, tumour necrosis, large tumour size, and c-erbB-2 expression. Perivascular and perilobular inflammation also increased with tumour grade. Tumour vascularity increased slightly with intensity of diffuse inflammation (Spearman's rank correlation coefficient rs = 0.17, p = 0.08), and was inversely related to perilobular inflammation (rs = -0.23, p = 0.03). CONCLUSIONS: The correlations between inflammation and vascularity were weak in this study (r2 about 0.04) and thus there was no evidence of an important relation. Discrepancies between this and other studies may be resolved by studying expression of angiogenic cytokines and proteolytic enzymes by tumour infiltrating inflammatory cells, and their relation to tumour vascularity.

L9 ANSWER 100 OF 215 MEDLINE DUPLICATE 79
ACCESSION NUMBER: 1998003006 MEDLINE
DOCUMENT NUMBER: 98003006 PubMed ID: 9344321
TITLE: Isolation limb perfusion with tumor necrosis factor alpha and chemotherapy for advanced extremity soft tissue sarcomas.
AUTHOR: Eggermont A M; Schraffordt Koops H; Klausner J M; Lienard D; Kroon B B; Schlag P M; Ben-Ari G; Lejeune F J
CORPORATE SOURCE: University Hospital Rotterdam, Daniel den Hoed Cancer Center, The Netherlands.
SOURCE: SEMINARS IN ONCOLOGY, (1997 Oct) 24 (5) 547-55.
Journal code: UN5; 0420432. ISSN: 0093-7754.
PUB. COUNTRY: United States
(CLINICAL TRIAL)
(CONTROLLED CLINICAL TRIAL)
Journal; Article; (JOURNAL ARTICLE)
(MULTICENTER STUDY)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199711
ED Entered STN: 19971224
Last Updated on STN: 20000303
Entered Medline: 19971104
AB The unique property of high dose recombinant tumor necrosis factor alpha (rTNF alpha) is to activate and selectively destroy the tumor-associated microvasculature. For the systemic application of rTNF alpha it has been shown that the maximum tolerated dose (MTD) is 10. . . less than the effective dose in animals. The main toxicity corresponds to systemic inflammatory response syndrome with a decrease in vascular resistance and hypotension. We found that it is possible to administer rTNF alpha at 10 times the MTD in an. . . selective and early damage of the sarcoma-associated microvasculature preceded by the upregulation of adhesion molecules and intratumoral leak of von Willebrand factor. Tumor invasion by platelets and, in some cases, by polymorphonuclear cells, appeared within hours after the application of rTNFa long before the lysis of the tumor. Thus, ILP with high-dose TNF alpha and chemotherapy seems to act through a dual targeting: TNF hits the tumor associated vasculature, and chemotherapy attacks the tumor cells. Therefore, ILP with TNF is a new option in the management of locally advanced soft tissue sarcoma of the. . .

L9 ANSWER 101 OF 215 MEDLINE DUPLICATE 80
ACCESSION NUMBER: 97463898 MEDLINE
DOCUMENT NUMBER: 97463898 PubMed ID: 9322599
TITLE: Kaposiform hemangioendothelioma in adults. Clinicopathologic and immunohistochemical analysis of three cases.
AUTHOR: Mentzel T; Mazzoleni G; Dei Tos A P; Fletcher C D
CORPORATE SOURCE: Department of Pathology, University of Jena, Germany.
SOURCE: AMERICAN JOURNAL OF CLINICAL PATHOLOGY, (1997 Oct) 108 (4) 450-5.
Journal code: 3FK; 0370470. ISSN: 0002-9173.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 199711
ED Entered STN: 19971224
Last Updated on STN: 19971224
Entered Medline: 19971114
AB Kaposiform hemangioendothelioma (KHE) is a rare vascular neoplasm that previously has been described only in children. We report three cases occurring in adults. The patients, two men. . . the lateral aspect of the neck, and in the groin and buttock, and each was situated in superficial soft tissue. Tumor size ranged from 0.9 to 7 cm. Histologically, in all cases a lobular or nodular growth pattern of densely packed spindle-shaped tumor cells closely associated with small slitlike and sievelike blood vessels was seen. Within one lesion, small nodules of plumper, epithelioid tumor cells were identified. Well-formed capillaries frequently containing fibrin thrombi were observed mainly in the periphery of tumor nodules. Areas of hemorrhage and hemosiderin deposits were observed in two cases. Associated lymphangiomatosis composed of diffusely infiltrating lymphatic spaces. . . case up to 6 mitoses in 10 high-power fields were noted focally. Immunohistochemically, well-formed capillaries stained positively for all the vascular markers used; however, endothelial cells lining the small slitlike and sievelike vascular spaces did not stain for von Willebrand factor. At least focally, actin-positive pericytes were seen. Neoplastic spindled cells stained only focally for CD34 and CD31. Two lesions. . .

L9 ANSWER 102 OF 215 MEDLINE DUPLICATE 81
ACCESSION NUMBER: 97391879 MEDLINE
DOCUMENT NUMBER: 97391879 PubMed ID: 9248622
TITLE: Characterization of in vitro culture of HIV-negative Kaposi's sarcoma-derived cells. In vitro responses to alfa interferon.
AUTHOR: Lebbe C; de Cremoux P; Millot G; Podgorniak M P; Verola O; Berger R; Morel P; Calvo F
CORPORATE SOURCE: Laboratory of Pharmacology, Hopital Saint-Louis, Paris, France.
SOURCE: ARCHIVES OF DERMATOLOGICAL RESEARCH, (1997 Jun) 289 (7) 421-8.
Journal code: 6X7; 8000462. ISSN: 0340-3696.
PUB. COUNTRY: GERMANY: Germany, Federal Republic of
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English

FILE SEGMENT: Priority Journals
ENTRY MONTH: 199709
ED Entered STN: 19970922
Last Updated on STN: 19980206
Entered Medline: 19970911

AB We established long-term cultures from skin **tumors** of nine patients suffering from classical Kaposi's sarcoma (KS). Spindle cells obtained after enzymatic digestion were cultured on gelatin- or. . . the third passage in culture expressed the endothelial markers CD36, EMA 120 but were negative for UEA and Fc von **Willebrand**. Smooth muscle proteins were detected with immunoblotting. Using the polymerase chain reaction, human herpes virus 8 (HHV8) sequences were detected. . . KS-derived cells did not proliferate in serum-free medium, had a normal karyotype and did not grow in soft agar medium. **Tumors** formed in nude mice injected with KS-derived cells. The **tumors** were composed of mouse cells and were highly **vascularized**. Our results suggest that KS-derived cells are heterogeneous: the majority of cells have either a smooth muscle cell or a. . .

L9 ANSWER 103 OF 215 MEDLINE DUPLICATE 82
ACCESSION NUMBER: 97452191 MEDLINE
DOCUMENT NUMBER: 97452191 PubMed ID: 9306962
TITLE: Up-regulation of thymidine phosphorylase expression is associated with a discrete pattern of angiogenesis in ductal carcinomas in situ of the breast.
AUTHOR: Engels K; Fox S B; Whitehouse R M; Gatter K C; Harris A L
CORPORATE SOURCE: Department of Cellular Science, Institute of Molecular Medicine, John Radcliffe Hospital, University of Oxford, U.K.
SOURCE: JOURNAL OF PATHOLOGY, (1997 Aug) 182 (4) 414-20.
Journal code: JLB; 0204634. ISSN: 0022-3417.
PUB. COUNTRY: ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199710
ED Entered STN: 19971024
Last Updated on STN: 19971024
Entered Medline: 19971016

AB Angiogenesis is essential for **tumour** growth and metastasis. Although **vascular** density as a measure of angiogenesis is an important prognostic factor in invasive breast carcinoma, the mechanism of a switch to an angiogenic phenotype in ductal in situ breast carcinomas (DCIS) has yet to be identified. Nevertheless, two distinct **vascular** patterns have been reported in DCIS: a diffuse increase of stromal **vascularity** and a dense rim of microvessels close to the basement membrane of involved ducts. This suggests that **tumour** angiogenesis in invasive breast **cancer** arises from two different angiogenic pathways. Platelet-derived endothelial cell growth factor, now known to be thymidine phosphorylase (TP), is a candidate for initiating one of these pathways, since it is important in remodelling the existing **vasculature** through its chemotactic non-mitogenic properties and is expressed early in breast **cancer** development. The expression of TP was therefore examined in 75 formalin-fixed, paraffin-embedded specimens of DCIS by immunohistochemistry, using the monoclonal antibody PGF44c to detect TP. The results were correlated with blood vessel staining by polyclonal antibodies to von **Willebrand** factor (Factor VIII-related antigen, FVIIIrAg) and other clinicopathological variables. TP expression was nuclear and/or cytoplasmic and was observed in all subtypes of DCIS. High TP expression was demonstrated in 36 per cent (27/75) of **tumours**. This was not limited to the neoplastic cells, but was also present in stroma, endothelium, and **tumour** -associated macrophages. There was no correlation between high TP and DCIS subtype ($P > 0.05$). There was a significant correlation between TP expression and the presence of a dense **vascular** rim ($P = 0.042$; chi 2 = 4.1), but not with an increase in stromal **vascularity** ($P = 0.800$; chi 2 = 0.1). There was no significant correlation between **tumour** TP expression and relapse-free survival ($P = 0.662$; chi 2 = 0.2). These findings suggest that remodelling of the pre-existing **vascular** network induced by TP is important in generating a dense rim of microvessels around DCIS.

L9 ANSWER 104 OF 215 MEDLINE DUPLICATE 83
ACCESSION NUMBER: 1998088476 MEDLINE
DOCUMENT NUMBER: 98088476 PubMed ID: 9427037
TITLE: Are endothelial cell patterns of astrocytomas indicative of grade?.
AUTHOR: Selby D M; Woodard C A; Henry M L; Bernstein J J
CORPORATE SOURCE: Department of Pathology, Children's National Medical Center, Washington, DC 20010, USA.
CONTRACT NUMBER: CA48956 (NCI)
SOURCE: IN VIVO, (1997 Sep-Oct) 11 (5) 371-5.
Journal code: A6F; 8806809. ISSN: 0258-851X.
PUB. COUNTRY: Greece
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199803
ED Entered STN: 19980312
Last Updated on STN: 19980312
Entered Medline: 19980305

AB BACKGROUND: The most common primary brain **tumors** in children and adults are of astrocytic origin. Classic histologic grading schemes for astrocytomas have included evaluating the presence or absence of nuclear abnormalities, mitoses, **vascular** endothelial proliferation, and **tumor** necrosis. MATERIALS AND METHODS: We evaluated the **vascular** pattern of 17 astrocytoma surgical specimens (seven from children and 10 from adults), and four normal brains obtained at autopsy, utilizing antibody to glial fibrillary acidic protein (GFAP) and von **Willebrand** factor (**vWF**) utilizing confocal microscopy. A modified WHO classification was used. RESULTS: All **tumor** cases showed cells positive for GFAP. Control tissues showed a few, widely separated vessels. Pilocytic astrocytomas (four cases) showed lacy. . . density with multiple small vessels (glomeruloid clusters), some with prominent intimal hyperplasia, loss of vessel wall integrity, and with numerous **vWF**-positive single cells/microvessels within the **tumor** substance. CONCLUSIONS: Evaluation of astrocytomas utilizing antibody to **vWF** and confocal microscopy aids in the grading of these neoplasms.

L9 ANSWER 105 OF 215 MEDLINE DUPLICATE 84
ACCESSION NUMBER: 1998016389 MEDLINE
DOCUMENT NUMBER: 98016389 PubMed ID: 9354769

TITLE: Expression of matrix metalloprotease-9 in vascular pericytes in human breast cancer.
AUTHOR: Nielsen B S; Sehested M; Kjeldsen L; Borregaard N; Rygaard J; Dano K
CORPORATE SOURCE: Department of Pathology, Rigshospitalet, Copenhagen, Denmark.
SOURCE: LABORATORY INVESTIGATION, (1997 Oct) 77 (4) 345-55. Journal code: KZ4; 0376617. ISSN: 0023-6837.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199711
ED Entered STN: 19971224
Last Updated on STN: 20000303
Entered Medline: 19971121

AB . . . 92-kd type IV collagenase, gelatinase B) is regarded as important for degradation of the basement membrane and extracellular matrix during **cancer** invasion and other tissue-remodeling events. Expression of MMP-9 was analyzed in 22 cases of human ductal breast **cancer** by immunohistochemistry and in 8 of these cases also by in situ hybridization. For immunohistochemistry we used affinity-purified polyclonal antibodies. . . different stromal cell types with a positive MMP-9 immunoreaction were identified morphologically: neutrophils and macrophage-like cells in all cases and **vascular** cells in 16 of 22 cases. Double immunofluorescence with antibodies to CD68 conclusively demonstrated MMP-9 expression in macrophages. To identify the positive **vascular** cells, we employed antibodies to von **Willebrand** factor and PAL-E for identification of endothelial cells, high molecular weight melanoma-associated antigen for pericytes, and alpha-smooth muscle actin for **vascular** smooth muscle cells. Using conventional and confocal double immunofluorescence microscopy, colocalization of MMP-9 was seen with high molecular weight melanoma-associated. . . coexpression was seen with alpha-smooth muscle actin. Virtually no coexpression was seen with the endothelial cell markers PAL-E and von **Willebrand** factor. In situ hybridization showed that MMP-9 mRNA colocalized with MMP-9 immunoreactivity in macrophages and **vascular** structures, whereas no MMP-9 mRNA was detected in neutrophils. No MMP-9 immunostaining or in situ hybridization signal was detected in **cancer** cells in any of the cases. Based on these results, it is concluded that MMP-9 in human breast **cancer** is located in **tumor**-infiltrating stromal cells, including neutrophils, macrophages, and **vascular** pericytes, and that the latter two cell types also produce this metalloprotease. We suggest that the MMP-9 produced in pericytes may play a role in extracellular matrix degradation during **tumor** angiogenesis.

L9 ANSWER 106 OF 215 MEDLINE DUPLICATE 85
ACCESSION NUMBER: 1998081425 MEDLINE
DOCUMENT NUMBER: 98081425 PubMed ID: 9421072
TITLE: Angiogenesis in uterine cervical intraepithelial neoplasia and squamous cell carcinoma: an immunohistochemical study.
AUTHOR: Davidson B; Goldberg I; Kopolovic J
CORPORATE SOURCE: Department of Pathology, Sheba Medical Center, Tel-Hashomer, Israel.
SOURCE: INTERNATIONAL JOURNAL OF GYNECOLOGICAL PATHOLOGY, (1997 Oct) 16 (4) 335-8. Journal code: GR8; 8214845. ISSN: 0277-1691.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199802
ED Entered STN: 19980224
Last Updated on STN: 19980224
Entered Medline: 19980211

AB Changes in **vascular** patterns aid in the colposcopic diagnosis of cervical neoplasia. We have studied vessels in 50 cases of normal cervix, cervical intraepithelial neoplasia (CIN I, II, III), and invasive carcinoma by two markers, Von-**Willebrand** factor (**VWF**) and ulex europaeus lectin I. With both markers, an increase in microvessel counts parallel to neoplastic progression was seen, with highest counts observed in CIN III. Average counts for ulex lectin and **VWF** increased from approximately 6 vessels per field in normal cervices to 15 vessels per field in CIN III. For each diagnostic group, comparable numbers of vessels were stained by both markers, with a slight preponderance of **VWF** in invasive carcinomas and of ulex lectin in noninvasive lesions. No correlation was found between microvessel count and human papilloma. . . occurs in cervical neoplasia. The vessels are mostly blood vessels, not lymphatics. Therefore, the role of enhanced microvessel density in **tumor** spread remains to be proven.

L9 ANSWER 107 OF 215 MEDLINE DUPLICATE 86
ACCESSION NUMBER: 97163259 MEDLINE
DOCUMENT NUMBER: 97163259 PubMed ID: 9010094
TITLE: Tumor vascularity correlates with the prognosis of patients with esophageal squamous cell carcinoma.
AUTHOR: Tanigawa N; Matsumura M; Amaya H; Kitaoka A; Shimomatsuya T; Lu C; Muraoka R; Tanaka T
CORPORATE SOURCE: Second Department of Surgery, Fukui Medical School, Japan.
SOURCE: CANCER, (1997 Jan 15) 79 (2) 220-5. Journal code: CLZ; 0374236. ISSN: 0008-543X.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 199702
ED Entered STN: 19970306
Last Updated on STN: 19970306
Entered Medline: 19970221

AB BACKGROUND: Angiogenesis is essential for the growth of solid **tumors**. Intratumoral microvessel count, which represents a measure of **tumor** angiogenesis, has been associated with the overall survival of patients with a variety of malignancies. However, little is known about the significance of neovascularization in esophageal squamous cell carcinoma. METHODS: In this study, the role of **tumor** angiogenesis as a prognostic indicator was examined in esophageal squamous cell carcinomas from 43 patients. **Vascular** endothelial cells were stained with anti-CD34 and anti-von **Willebrand** factor monoclonal antibodies before being quantitated by light microscopy (x 200). RESULTS: Significant correlation between vessel counts for two antibodies was observed, although counts for CD34 were approximately three times higher. Intratumoral vessel counts were significantly higher in

tumors with deeper penetration. Multivariate analyses indicated that vessel counts determined by either CD34 or von Willebrand factor staining, as well as lymph node metastasis, were identified as significant and independent prognostic factors in patients with esophageal squamous cell carcinoma. CONCLUSIONS: These findings support the hypothesis that tumor angiogenesis is closely related to the overall survival of patients with esophageal squamous cell carcinoma. The extent of tumor vascularity may serve as a reliable prognostic marker with which patients at risk for recurrence can be identified.

L9 ANSWER 108 OF 215 MEDLINE DUPLICATE 87
ACCESSION NUMBER: 1998185461 MEDLINE
DOCUMENT NUMBER: 98185461 PubMed ID: 9524773
TITLE: HGF/SF in angiogenesis.
AUTHOR: Rosen E M; Lamszus K; Laterra J; Polverini P J; Rubin J S; Goldberg I D
CORPORATE SOURCE: Department of Radiation Oncology, Long Island Jewish Medical Center, New Hyde Park, NY 11040, USA.
CONTRACT NUMBER: CA-64416 (NCI)
CA-64869 (NCI)
SOURCE: CIBA FOUNDATION SYMPOSIUM, (1997) 212 215-26; discussion 227-9. Ref: 61
Journal code: D7X; 0356636. ISSN: 0300-5208.
PUB. COUNTRY: Netherlands
Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199805
ED Entered STN: 19980529
Last Updated on STN: 19980529
Entered Medline: 19980518

AB Hepatocyte growth factor/scatter factor (HGF/SF) is a mesenchyme-derived cytokine that stimulates motility and invasiveness of epithelial and cancer cells. These responses are transduced through the c-met proto-oncogene product, a transmembrane tyrosine kinase that functions as the HGF/SF receptor.. . . shown that HGF/SF is a potent angiogenic molecule and that its angiogenic activity is mediated primarily through direct actions on vascular endothelial cells. These include stimulation of cell migration, proliferation, protease production, invasion, and organization into capillary-like tubes. We further showed that HGF/SF is overexpressed in invasive human cancers, including breast cancer, relative to non-invasive cancers and benign conditions. In invasive breast cancers , the content of HGF/SF is strongly correlated with that of von Willebrand's factor, a marker of vascular endothelial cells. Furthermore, transfection of breast cancer and glioma cell lines with HGF/SF cDNA greatly enhanced the ability of these cells to grow as tumours in orthotopic sites in syngeneic or immunocompromized host animals. The increased growth rate of the HGF/SF-transfected cells was attributable, in part, to increased tumour angiogenesis. These findings suggest that HGF/SF may function as a tumour progression factor, in part by stimulating tumour cell invasiveness and in part by stimulating angiogenesis.

L9 ANSWER 109 OF 215 MEDLINE DUPLICATE 88
ACCESSION NUMBER: 97175749 MEDLINE
DOCUMENT NUMBER: 97175749 PubMed ID: 9023404
TITLE: Endothelial and macrophage upregulation of urokinase receptor expression in human renal cell carcinoma.
AUTHOR: Xu Y; Hagege J; Doublet J D; Callard P; Sraer J D; Ronne E; Rondeau E
CORPORATE SOURCE: Service de Nephrologie A, Association Claude Bernard and INSERM U 64, Hopital Tenon, Paris, France.
SOURCE: HUMAN PATHOLOGY, (1997 Feb) 28 (2) 206-13.
Journal code: GEC; 9421547. ISSN: 0046-8177.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199703
ED Entered STN: 19970313
Last Updated on STN: 19970313
Entered Medline: 19970306

AB . . . has been shown to enhance plasminogen activation, a process involved in extracellular matrix degradation and cell migration during angiogenesis and tumor growth. We investigated the expression of u-PA and uPA-R in renal cell carcinomas (n = 11). By immunohistochemistry using monoclonal and polyclonal anti-uPA-R antibodies, we found that tumoral capillary endothelial cells (von Willebrand factor and CD31 positive cells) overexpressed uPA-R, whereas vascular endothelial cells of the normal human kidney do not. In addition, tumor-associated macrophages (CD68-positive cells) strongly expressed uPA-R. In contrast, few tumoral cells and stromal fibroblasts expressed uPA-R. By in situ hybridization using a cDNA S35-labeled probe specific for uPA-R, we confirmed the local expression of uPA-R messenger RNA. We also detected the induction of u-PA in tumoral capillary endothelial cells and in tumor -associated macrophages. In two cases, tumoral cells themselves were also stained by anti-u-PA antibodies in focal areas. Finally tissue-type plasminogen activator (t-PA) was also overexpressed by tumoral capillary endothelial cells as compared with endothelial cells of normal human kidney vessels. These findings indicate an active invasive phenotype of endothelial cells in renal cell carcinoma and suggest a role for the plasminogen activation system in tumoral angiogenesis and invasion.

L9 ANSWER 110 OF 215 MEDLINE DUPLICATE 89
ACCESSION NUMBER: 1998230281 MEDLINE
DOCUMENT NUMBER: 98230281 PubMed ID: 9570355
TITLE: Vascular endothelial growth factor (VEGF) expression and survival in human epithelial ovarian carcinomas.
AUTHOR: Hartenbach E M; Olson T A; Goswitz J J; Mohanraj D; Twiggs L B; Carson L F; Ramakrishnan S
CORPORATE SOURCE: Department of Obstetrics and Gynecology, University of Wisconsin, Madison 53792, USA.
CONTRACT NUMBER: CA-48068 (NCI)
SOURCE: CANCER LETTERS, (1997 Dec 23) 121 (2) 169-75.
Journal code: CMX; 7600053. ISSN: 0304-3835.
PUB. COUNTRY: Ireland
(CLINICAL TRIAL)

Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199805
ED Entered STN: 19980520
Last Updated on STN: 19980520
Entered Medline: 19980513

AB **Vascular** endothelial growth factor (VEGF) expression and microvessel density were studied in cases of advanced epithelial ovarian carcinoma to evaluate their usefulness as prognostic variables. **Tumor** samples from 18 patients with advanced stage serous epithelial ovarian **cancer** were evaluated for VEGF expression by reverse-transcriptase polymerase chain reaction (RT-PCR) analysis. Immunohistochemical study of corresponding archival tissues with an antibody to von **Willebrand** factor (**vWF**; FVIII-RA) was used for **tumor** microvessel count determinations. The correlation of VEGF expression and mean microvessel counts was determined by an unpaired t-test. Survival analysis. . . Kaplan and Meier and significant differences between distributions were analyzed with a log rank test. From the RT-PCR analysis of **tumor** VEGF expression, 12 samples were found to be strongly positive, whereas six samples had low/negative VEGF expression. The median survival. . . = 0.873), FIGO stage (P = 0.06), grade (P = 0.236) and debulking status (P = 0.842). Fourteen of 18 **tumor** specimens were suitable for microvessel counting. The mean microvessel counts of the VEGF-positive group and the VEGF-negative group were 27/hpf. . . associated with poor overall survival. Further study will be necessary to elucidate the lack of association of VEGF expression and **tumor** microvessel counts.

L9 ANSWER 111 OF 215 MEDLINE DUPLICATE 90
ACCESSION NUMBER: 97386870 MEDLINE
DOCUMENT NUMBER: 97386870 PubMed ID: 9242960
TITLE: von Willebrand factor and soluble E-selectin in the prediction of cardiovascular disease progression in hyperlipidaemia.
AUTHOR: Blann A D; Miller J P; McCollum C N
CORPORATE SOURCE: University Department of Medicine, City Hospital, Birmingham, UK.
SOURCE: ATHEROSCLEROSIS, (1997 Jul 25) 132 (2) 151-6.
Journal code: 95X; 0242543. ISSN: 0021-9150.
PUB. COUNTRY: Ireland
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199709
ED Entered STN: 19971008
Last Updated on STN: 19971008
Entered Medline: 19970923

AB Two specific endothelial cell products, von **Willebrand** factor and soluble E-selectin, were measured together with serum lipids, lipoprotein(a), systolic and diastolic blood pressure (SHP, DBP) in a. . study of 162 patients attending a dedicated lipid clinic. Patients were further classified by the presence or absence of symptomatic **vascular** disease and smoking. After a mean of 49 months, 45 patients experienced a cardiovascular event (fatal or nonfatal myocardial infarction, stroke, or arterial surgery) and 11 developed non-cardiovascular diseases, including **cancer**. In univariate analysis, existing **vascular** disease (P < 0.01), increased levels of von **Willebrand** factor (P < 0.0001) and low density lipoprotein cholesterol (P < 0.02), greater age (P < 0.01), and lower levels of soluble E-selectin (P < 0.03) were all predictive of future **vascular** events. However, in multivariate analysis, only increased von **Willebrand** factor was predictive (P < 0.001). von **Willebrand** factor was also higher in patients who developed non-cardiovascular disease relative to those free of disease (P < 0.05). Our data support the hypothesis that increased levels of von **Willebrand** factor are an indicator of poor prognosis in patients with atherosclerosis or its risk factors.

L9 ANSWER 112 OF 215 MEDLINE DUPLICATE 91
ACCESSION NUMBER: 1998038279 MEDLINE
DOCUMENT NUMBER: 98038279 PubMed ID: 9370945
TITLE: The association between tumour progression and vascularity in the oral mucosa.
AUTHOR: Pazouki S; Chisholm D M; Adi M M; Carmichael G; Farquharson M; Ogden G R; Schor S L; Schor A M
CORPORATE SOURCE: Department of Dental Surgery and Periodontology, Dental School, University of Dundee, U.K.
SOURCE: JOURNAL OF PATHOLOGY, (1997 Sep) 183 (1) 39-43.
Journal code: JLB; 0204634. ISSN: 0022-3417.
PUB. COUNTRY: ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199712
ED Entered STN: 19980109
Last Updated on STN: 19980109
Entered Medline: 19971208

AB **Tumourigenesis** in experimental models is associated with the formation of new blood vessels (angiogenesis). Recent studies have suggested that **tumour** angiogenic activity may be inferred in histological sections by measuring the density of the **vasculature** . The purpose of this study was to determine whether the transition from normal to dysplastic and neoplastic tissue in the oral mucosa is accompanied by quantitative or qualitative changes in the **vascularity** of the tissue, and how the estimate of **vascularity** is influenced by the vessel marker and method of assessment. A total of 100 specimens of normal oral mucosa, dysplastic lesions, and squamous cell carcinomas were examined. Sections were immunostained with the pan-endothelial antibodies to von **Willebrand** Factor (**vWF**) and CD31, or with an antibody to the alpha v beta 3 integrin, previously reported to be a marker of angiogenic vessels. **Vascularity** was quantitated by two different methods: highest microvascular density (h-MVD) and microvascular volume, as determined by point counting (MVV). The results showed that **vascularity**, measured by the MVV method using antibodies to either **vWF** or CD31, increased significantly (P < 0.0001) with disease progression from normal oral mucosa, through mild, moderate, and severe dysplasia. . . 3 in 24 frozen tissues examined, including normal oral mucosa. It is concluded that there is a close association between **vascularity** and **tumour** progression in the oral mucosa. Morphometric analysis reflecting microvascular volume is more informative than the currently popular analysis of microvascular density. The

expression of alpha v beta 3 in the vasculature of oral tissues does not necessarily reflect the presence of angiogenic vessels.

L9 ANSWER 113 OF 215 MEDLINE DUPLICATE 92
ACCESSION NUMBER: 97440318 MEDLINE
DOCUMENT NUMBER: 97440318 PubMed ID: 9294625
TITLE: Vascular density is a predictor of cancer-specific survival in prostatic carcinoma.
AUTHOR: Lissbrant I F; Stattin P; Damber J E; Bergh A
CORPORATE SOURCE: Department of Pathology, Umea University, Sweden.
SOURCE: PROSTATE, (1997 Sep 15) 33 (1) 38-45.
Journal code: PB4; 8101368. ISSN: 0270-4137.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199710
ED Entered STN: 19971021
Last Updated on STN: 19971021
Entered Medline: 19971009

AB BACKGROUND: Microvessel density has been shown to give prognostic information in a variety of solid tumors, but its role in prostatic carcinoma needs further elucidation. METHODS: Intratumoral density of von Willebrand factor-positive microvessels was assessed in 98 cases of prostatic carcinoma, diagnosed at transurethral resection of the prostate (TURP) between 1975-1983, using two methods: 1) volume density of microvessels and 2) vascular count in the 2-3 most vascularized fields. RESULTS: Volume density and vascular counts were highly correlated. In Kaplan-Meyer analysis, mean cancer-specific survival time for patients with a vascular count < 135 was significantly longer than for patients with a vascular count > 135 (P = 0.0064). The same results applied to patients with WHO grade II tumors (P = 0.01). Excluding metastasis in a multivariate analysis, both tumor stage and vascular count had an independent predictive value for cancer-specific survival in patients with WHO grade II tumors. CONCLUSIONS: Microvessel density may predict cancer-specific survival in prostatic carcinoma.

L9 ANSWER 114 OF 215 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 1997:151842 BIOSIS
DOCUMENT NUMBER: PREV199799451045
TITLE: Characterization of ovine umbilical vein endothelial cells and their expression of cell adhesion molecules: Comparative study with human endothelial cells.
AUTHOR(S): Grooby, Warwick L.; Krishnan, Ravi; Russ, Graeme R. (1)
CORPORATE SOURCE: (1) Transplantation Immunol. Lab., Queen Elizabeth Hosp., Woodville Rd., Woodville, SA 5011 Australia
SOURCE: Immunology and Cell Biology, (1997) Vol. 75, No. 1, pp. 21-28.
ISSN: 0818-9641.
DOCUMENT TYPE: Article
LANGUAGE: English
IT . . .
I; MAJOR HISTOCOMPATIBILITY COMPLEX CLASS II; MESSENGER RNA; METABOLISM; MHC CLASS I; MHC CLASS II; MRNA; P-SELECTIN; RECOMBINANT OVINE-TNF-ALPHA; RECOMBINANT OVINE-TUMOR NECROSIS FACTOR-ALPHA; SHEEP UMBILICAL VEIN ENDOTHELIAL CELLS; SHUVEC CELL LINE; VASCULAR CELL ADHESION MOLECULE-1; VON WILLEBRAND FACTOR

L9 ANSWER 115 OF 215 MEDLINE DUPLICATE 93
ACCESSION NUMBER: 96221144 MEDLINE
DOCUMENT NUMBER: 96221144 PubMed ID: 8653715
TITLE: Extent of tumor vascularization correlates with prognosis and hematogenous metastasis in gastric carcinomas.
AUTHOR: Tanigawa N; Amaya H; Matsumura M; Shimomatsuya T; Horiuchi T; Muraoka R; Iki M
CORPORATE SOURCE: The Second Department of Surgery, Fukui Medical School, Japan.
SOURCE: CANCER RESEARCH, (1996 Jun 1) 56 (11) 2671-6.
Journal code: CNF; 2984705R. ISSN: 0008-5472.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199607
ED Entered STN: 19960808
Last Updated on STN: 19960808
Entered Medline: 19960730

AB To determine whether tumor angiogenesis correlates with prognosis and metastasis of patients with gastric carcinoma, we counted the microvessels within the primary carcinoma and compared their numbers with the patient's prognosis and mode of metastasis. Tumor specimens from 110 patients with gastric carcinoma, who had undergone curative resection more than 24 months before, were investigated. Intratumoral microvessels were stained with anti-CD34 and anti-von Willebrand factor monoclonal antibodies before being quantitated by light microscopy (x200). The antibody against von Willebrand factor often showed variability and stromal background staining, providing misleading low vessel counts. The data from three patients who died. . . CD34 expression were significantly higher in patients who experienced hematogenous or peritoneal metastasis after surgery than in patients with nonmetastatic tumors. No correlation between vessel counts and lymph node metastasis was found. The prevalence of hematogenous metastasis. but not peritoneal metastasis,. . . but not peritoneal recurrence. It was the most important factor for predicting overall survival. These findings support the hypothesis that tumor angiogenesis is closely related to the development of hematogenous metastasis in human gastric carcinomas. Assessment of tumor vascularization may, therefore, prove valuable in identifying patients with gastric carcinoma at high risk for recurrence who would benefit from adjuvant. . .

L9 ANSWER 116 OF 215 MEDLINE DUPLICATE 94
ACCESSION NUMBER: 96197532 MEDLINE
DOCUMENT NUMBER: 96197532 PubMed ID: 8616870
TITLE: Concentration of vascular endothelial growth factor in the serum and tumor tissue of brain tumor patients.
AUTHOR: Takano S; Yoshii Y; Kondo S; Suzuki H; Maruno T; Shirai S; Nose T
CORPORATE SOURCE: Department of Neurosurgery, Soujinkai Hospital, Ibaraki, Japan.

SOURCE: CANCER RESEARCH, (1996 May 1) 56 (9) 2185-90.
Journal code: CNF; 2984705R. ISSN: 0008-5472.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199606
ED Entered STN: 19960620
Last Updated on STN: 19960620
Entered Medline: 19960612

AB **Vascular** endothelial growth factor (VEGF) has been investigated as a potent mediator of brain **tumor** angiogenesis, **vascular** permeability, and glioma growth. Using a VEGF ELISA, we determined the concentration of VEGF in the sera and **tumor** extracts of 19 brain **tumor** patients including glioblastoma, anaplastic astrocytoma, low grade astrocytoma, meningioma, malignant lymphoma, and metastatic brain **tumor** as well as normal brain. Although VEGF concentration of the serum was not correlated with that of the tissue, VEGF concentrations of glioblastoma cyst fluid were 200-300-fold higher than those of serum in the patients. VEGF concentration in the **tumors** was significantly correlated with the **vascularity** measured by counting vessels stained with von **Willebrand** factor antibody. VEGF protein localized to the cytoplasm of **tumor** cells and **vasculature** in gliomas, predominantly in the peripheral microvessel "hot spots" as well as around the necrosis in glioblastomas. VEGF immunopositivities were. . . that VEGF represents a useful marker and measurable element of glioblastoma angiogenesis. The measurement of VEGF concentration by ELISA in **tumor** and **tumor** cyst fluid may allow for the assessment of **vascularity** in gliomas.

L9 ANSWER 117 OF 215 MEDLINE DUPLICATE 95
ACCESSION NUMBER: 1999035223 MEDLINE
DOCUMENT NUMBER: 99035223 PubMed ID: 9816143
TITLE: Vascularity of proliferative breast disease and carcinoma in situ correlates with histological features.
AUTHOR: Heffelfinger S C; Yassin R; Miller M A; Lower E
CORPORATE SOURCE: Departments of Pathology and Laboratory Medicine and Internal Medicine, University of Cincinnati, Cincinnati, Ohio 45367, USA.
SOURCE: CLINICAL CANCER RESEARCH, (1996 Nov) 2 (11) 1873-8.
Journal code: C2H; 9502500. ISSN: 1078-0432.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199902
ED Entered STN: 19990301
Last Updated on STN: 19990301
Entered Medline: 19990216

AB The level of **vascularity** within an invasive breast carcinoma is a predictor of metastatic potential and survival. However, little is known about the **vascular** potential and prognostic value of angiogenesis in preinvasive breast pathology. Women with proliferative breast disease or carcinoma in situ are at increased risk of developing invasive breast **cancer**. This relative risk increases in correlation with defined histopathological features. We asked whether these early proliferative lesions and carcinoma in situ were capable of inducing a **vascular** supply. **Vascularity** in preinvasive archival paraffin-embedded breast tissue from 90 patients was quantified by immunohistochemical identification of vessels using anti-von **Willebrand** factor. **Vascular** scores were analyzed with respect to histopathological diagnosis, age at diagnosis, and presence of coincident invasive disease. These data indicate that: (a) the **vascularity** of histopathologically normal epithelium is greater in breasts containing invasive disease than in breasts lacking invasive disease; (b) simple proliferative breast disease induces a **vascular** supply greater than that of normal breast epithelium; and (c) **vascularity** increases in proportion to epithelial lesion progression and relative risk of invasion. These studies indicate that the **vascularity** of preinvasive breast pathology may be a clinically useful predictor of invasive breast **cancer**.

L9 ANSWER 118 OF 215 MEDLINE DUPLICATE 96
ACCESSION NUMBER: 97099466 MEDLINE
DOCUMENT NUMBER: 97099466 PubMed ID: 8944035
TITLE: Malignant vascular tumors of the serous membranes mimicking mesothelioma. A report of 14 cases.
AUTHOR: Lin B T; Colby T; Gown A M; Hammar S P; Mertens R B; Churg A; Battifora H
CORPORATE SOURCE: Division of Pathology, City of Hope National Medical Center, Duarte, California 91010, USA.
SOURCE: AMERICAN JOURNAL OF SURGICAL PATHOLOGY, (1996 Dec) 20 (12) 1431-9.
Journal code: 3YV; 7707904. ISSN: 0147-5185.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199612
ED Entered STN: 19970128
Last Updated on STN: 19970128
Entered Medline: 19961226

AB . . . mesothelioma. The mean age at diagnosis was 52 (range, 34-85). The patients included two women and one man with peritoneal **tumors**, eight men with pleural **tumors**, and three men with pericardial **tumors**. A shared histological appearance was a diffuse sheet-like and clustered pattern of **tumor** growth with variable degrees of **vascular** differentiation. A tubulopapillary growth pattern, often seen in mesothelioma, was prominent in four cases. Nine cases showed a variable number. . . leiomyosarcoma. Immunohistochemically, strong vimentin staining and negative or weak to moderate cytokeratin staining were observed in all 14 cases. The **tumor** cells coexpressed at least two of the four endothelial markers used in the study (CD31, CD34, von **Willebrand** factor, and Ulex europaeus agglutinin-I [UEA-I)]. Detection of abortive vessel formation was facilitated by staining for collagen type IV. Markers. . . of any of the endothelial-lineage markers, with the exception of positive staining for UEA-I in occasional adenocarcinomas. Clinically, these endothelial **tumors** were highly aggressive; 12 patients presented with disseminated disease, and most died within months of the initial presentation. These findings. . .

L9 ANSWER 119 OF 215 MEDLINE DUPLICATE 97

ACCESSION NUMBER: 96192188 MEDLINE
DOCUMENT NUMBER: 96192188 PubMed ID: 8611409
TITLE: Association of vascular endothelial growth factor expression with intratumoral microvessel density and tumour cell proliferation in human epidermoid lung carcinoma.
AUTHOR: Mattern J; Koomagi R; Volm M
CORPORATE SOURCE: Department of Onkologische Diagnostik und Therapie, Deutsches Krebsforschungszentrum, Heidelberg, Germany.
SOURCE: BRITISH JOURNAL OF CANCER, (1996 Apr) 73 (7) 931-4. Journal code: AV4; 0370635. ISSN: 0007-0920.
PUB. COUNTRY: SCOTLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199606
ED Entered STN: 19960613
Last Updated on STN: 19980206
Entered Medline: 19960605

AB **Vascular** endothelial growth factor (VEGF) expression, **vascularisation** and **tumour** cell proliferation were analysed in 91 human epidermoid lung carcinomas using immunohistochemistry. A polyclonal anti-VEGF antibody was used for VEGF expression, a polyclonal antibody directed against human von **Willebrand** factor (factor VIII) to identify blood vessels and the proliferating cell nuclear antigen (PCNA) as a marker for proliferating cells.. . . PCNA-positive cells varied from 1.3% to 72.1% (mean 25.2%). The mean PCNA labelling index and mean microvessel count in VEGF-positive **tumours** were significantly higher than those in VEGF-negative **tumours** (Wilcoxon rank sum test, P<0.0001; p<0.05). In addition, PCNA labelling index significantly increased with increasing VEGF expression (Jonckheere test, P<0.0001). In contrast, no association was found between PCNA labelling index and **tumour** **vascularity** (r=0.07, P=0.48). The close correlation of VEGF expression with **tumour** cell proliferation and microvessel density suggests that VEGF acts both as an autocrine growth factor and as stimulator for angiogenesis. However, **tumour** cell proliferation and microvessel growth and/or density may be regulated by separate mechanisms.

L9 ANSWER 120 OF 215 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.DUPLICATE 98
ACCESSION NUMBER: 96325414 EMBASE
DOCUMENT NUMBER: 1996325414
TITLE: Quantification of microvessel density in human tumours: The effects of various pre-treatment methods and endothelial antibodies.
AUTHOR: Abdalla S.A.; Haboubi N.Y.; Kumar S.
CORPORATE SOURCE: Department of Histopathology, Univ. Hospital of South Manchester, Withington Hospital, Nell Lane,Manchester M20 8LR, United Kingdom
SOURCE: International Journal of Oncology, (1996) 9/5 (923-926). ISSN: 1019-6439 CODEN: IJONES
COUNTRY: Greece
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 005 General Pathology and Pathological Anatomy
016 Cancer
048 Gastroenterology
LANGUAGE: English
SUMMARY LANGUAGE: English

AB The current use of **tumour** microvascular density measurements in clinical practice is limited by the methods employed to identify and quantify the microvessels. The aim of this study was to assess **tumour** **vascularity** with three of the most commonly used endothelial markers and with different pre-treatment methods to determine which combination results in. . . sections of colorectal carcinoma were treated with microwave oven irradiation, pressure cooking or proteolytic digestion prior to immunostaining with von **Willebrand** factor ( **vWf**), CD31 or CD34. The sensitivity of staining was enhanced by microwave pre-treatment for CD31 and CD34, and trypsinization for **vWf**. There was a statistically significant difference between microvascular counts obtained using antibodies for CD34 and **vWf** (p = 0.004), and CD34 and CD31 (p = 0.007), but not for CD31 and **vWf** (p = 0.775). We conclude that the use of CD34 antibody on microwaved tissues is the most sensitive method to visualize and quantify **vascular** density in **tumours**.

L9 ANSWER 121 OF 215 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 1996:248541 BIOSIS
DOCUMENT NUMBER: PREV199698804670
TITLE: Investigation of microvessel density in different epidermal tumors and perilesional normal skin.
AUTHOR(S): Rendl, M. (1); Weninger, W. (1); Pammer, J.; Grin, W.; Tschachler, E. (1)
CORPORATE SOURCE: (1) Dep. Dermatol., Univ. Vienna Med. Sch., Vienna Austria
SOURCE: Journal of Investigative Dermatology, (1996) Vol. 106, No. 4, pp. 891.
Meeting Info.: Annual Meeting of the Society for Investigative Dermatology Washington, D.C., USA May 1-5, 1996
ISSN: 0022-202X.
DOCUMENT TYPE: Conference
LANGUAGE: English
IT . . .
IMMUNOHISTOCHEMISTRY; KERATOACANTHOMA; MEETING ABSTRACT; METASTASIS; NODULAR BASAL CELL CARCINOMA; RISK FACTOR; SCLERODERMIFORM BASAL CELL CARCINOMA; SQUAMOUS CELL CARCINOMA; STATISTICAL ANALYSIS; **TUMOR** GROWTH; **TUMOR VASCULARIZATION**; VON **WILLEBRAND** FACTOR

L9 ANSWER 122 OF 215 MEDLINE DUPLICATE 99
ACCESSION NUMBER: 96265006 MEDLINE
DOCUMENT NUMBER: 96265006 PubMed ID: 8669536
TITLE: Infantile hemangioendothelioma of the liver in a neonate. Immunohistochemical observations.
AUTHOR: Cerar A; Dolenc-Strazar Z D; Bartenjev D
CORPORATE SOURCE: Institute of Pathology, Medical School, University of Ljubljana, Slovenia.
SOURCE: AMERICAN JOURNAL OF SURGICAL PATHOLOGY, (1996 Jul) 20 (7) 871-6. Journal code: 3YV; 7707904. ISSN: 0147-5185.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals

ENTRY MONTH: 199608
ED Entered STN: 19960819
Last Updated on STN: 19960819
Entered Medline: 19960807

AB . . . autopsy in a 44-day-old girl. A precardial apical systolic murmur and hepatomegaly were found on day 4 of life. The tumor was multifocal and histologically composed of vascular channels lined by endothelial cells that were positive for von Willebrand factor, CD31, vimentin, and Ulex europaeus agglutinin 1, and that were invested in a continuous basement membrane (BM) on the. . . of these cells are characteristic of pericytes. We found neither signs of endocrine secretion nor hepatitis B virus in the tumor tissue. The appearance of this tumor in the neonatal period supports a fetal origin of IHE.

L9 ANSWER 123 OF 215 MEDLINE DUPLICATE 100
ACCESSION NUMBER: 96426269 MEDLINE
DOCUMENT NUMBER: 96426269 PubMed ID: 8828563
TITLE: Management of abnormal uterine bleeding.
AUTHOR: Chuong C J; Brenner P F
CORPORATE SOURCE: Department of Obstetrics and Gynecology, University of Medicine and Dentistry of New Jersey, Robert Wood Johnson Medical School at Camden 08103, USA.
SOURCE: AMERICAN JOURNAL OF OBSTETRICS AND GYNECOLOGY, (1996 Sep) 175 (3 Pt 2) 787-92. Ref: 35
Journal code: 3NI; 0370476. ISSN: 0002-9378.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 199610
ED Entered STN: 19961219
Last Updated on STN: 19990129
Entered Medline: 19961029

AB . . . bleeding resulting in hypovolemia, and a curettage or hysteroscopically directed biopsies is indicated for women with risk factors for endometrial cancer who have persistent bleeding problems. The management of anovulatory dysfunctional uterine bleeding is determined by the needs of the patient.. . . 18 to 25. The perimenopausal patient with dysfunctional uterine bleeding who is a nonsmoker and does not have evidence of vascular disease may also be treated with low-dose combination oral contraceptives. The long-term treatment for women with ovulatory dysfunctional uterine bleeding. . . fail all medical regimens, surgical therapy may be considered. Either hysterectomy or endometrial ablation has been used. Patients with von Willebrand's disease and excessive menstrual blood loss may be misdiagnosed as having dysfunctional uterine bleeding. van Willebrand's disease is the most common bleeding disorder and is present in approximately 1% of the population. It is much more. .

L9 ANSWER 124 OF 215 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 1997:192882 BIOSIS
DOCUMENT NUMBER: PREV199799492085
TITLE: Differences in vascular antigenicity between normal and neoplastic tissues.
AUTHOR(S): Davidson, B.; Goldberg, I.; Liokumovich, P.; Kopolovic, J.
CORPORATE SOURCE: Dep. Pathol., Sheba Med. Cent., Tel Hashomer Israel
SOURCE: Pathology International, (1996) Vol. 46, No. SUPPL. 1, pp. 651.
Meeting Info.: XXI International Congress of the International Academy of Pathology and 12th World Congress of Academic and Environmental Pathology Budapest, Hungary October 20-25, 1996
ISSN: 1320-5463.
DOCUMENT TYPE: Conference; Abstract; Conference
LANGUAGE: English
IT . . . Descriptors
ANGIOGENESIS; BLOOD VESSELS; CARDIOVASCULAR SYSTEM; CD31; CIRCULATORY SYSTEM; IMMUNE SYSTEM; LECTIN ULEX EUROPAEUS; MORPHOLOGY; NEOPLASTIC TISSUES; NORMAL TISSUES; ONCOPATHOLOGY; TUMOR BIOLOGY; VASCULAR ANTIGENICITY; VON WILLEBRAND FACTOR

L9 ANSWER 125 OF 215 MEDLINE DUPLICATE 101
ACCESSION NUMBER: 97028851 MEDLINE
DOCUMENT NUMBER: 97028851 PubMed ID: 8874864
TITLE: Fibrin deposition in primary and metastatic human brain tumours.
AUTHOR: Bardos H; Molnar P; Csecsei G; Adany R
CORPORATE SOURCE: Department of Hygiene and Epidemiology, University School of Medicine, Debrecen, Hungary.
SOURCE: BLOOD COAGULATION AND FIBRINOLYSIS, (1996 Jul) 7 (5) 536-48.
Journal code: A5J; 9102551. ISSN: 0957-5235.
PUB. COUNTRY: ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199702
ED Entered STN: 19970219
Last Updated on STN: 19970219
Entered Medline: 19970205

AB Extravascular, intratumoral fibrin deposition is frequently observed within and around neoplastic tissue and has been implicated in various aspects of tumour growth. This is the first report on the presence and distribution of fibrinogen/fibrin in primary (14 glioblastomas) and metastatic (nine samples of lung cancer origin) human brain tumours detected by immunofluorescent techniques. All tissue samples showed specific staining for fibrinogen/fibrin. In glioblastomas fibrin deposits could be detected within and around tumour foci, while in metastatic brain tumours the tumour cell nodules were surrounded by fibrin deposits localized almost exclusively in the connective tissue compartment of tumours. Double-labelling reactions for von Willebrand factor and fibrinogen/fibrin has revealed that fibrin deposition occurred throughout the tumour stroma independently of tumour vasculature. The overlapping reactions for fibrinogen/fibrin and factor XIII subunit A, as well as the urea-insolubility of the deposits indicate the crosslinked, highly stabilized nature of fibrin both within and around tumours. Staining with Ki M7 monoclonal antibody specific for phagocytosing

macrophages showed these cells to be scattered in the nonnecrotic areas in glioblastomas and to be accumulated at the interface of tumorous parenchyma and connective tissue in both primary and metastatic tumours. The close association between fibrin deposition and macrophage accumulation strongly suggests the active participation of tumour associated macrophages in the formation of stabilized intratumoral fibrin network in human brain neoplasms.

L9 ANSWER 126 OF 215 MEDLINE DUPLICATE 102
ACCESSION NUMBER: 96396475 MEDLINE
DOCUMENT NUMBER: 96396475 PubMed ID: 8803595
TITLE: Expression of adhesion molecules and extracellular matrix proteins in glioblastomas: relation to angiogenesis and spread.
AUTHOR: Vitolo D; Paradiso P; Uccini S; Ruco L P; Baroni C D
CORPORATE SOURCE: Department of Experimental Medicine and Pathology, University La Sapienza Roma, Italy.
SOURCE: HISTOPATHOLOGY, (1996 Jun) 28 (6) 521-8. Journal code: GB4; 7704136. ISSN: 0309-0167.
PUB. COUNTRY: ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199612
ED Entered STN: 19970128
Last Updated on STN: 19970128
Entered Medline: 19961219
AB . . . 10 cases of glioblastoma multiforme in order to investigate their angiogenesis, local invasiveness, poor metastasizing properties and their lack of tumour infiltrating leukocytes. In glioblastomas endothelial proliferations represent the majority of vascular structures; they were positive for endothelial markers (vWF, CD31, VE-cadherin) and negative for macrophage markers (CD68, PAM-1). Immunohistologically, they were subtyped into: 1 solid-glomeruloid ICAM-1, alpha 2 beta. . . . might indicate different steps of maturation of endothelial proliferations. The majority of endothelial proliferations may be immunohistologically considered as incomplete vascular structures; this might account for the low metastasizing tendency and low recruitment of leukocytes by these tumours. Neoplastic astrocytes were GFAP-1, ICAM-1, VCAM-1, alpha 2 beta 1, alpha 3 beta 1 and alpha 5 beta 1 immunoreactive. . .

L9 ANSWER 127 OF 215 MEDLINE DUPLICATE 103
ACCESSION NUMBER: 96373871 MEDLINE
DOCUMENT NUMBER: 96373871 PubMed ID: 8780162
TITLE: Production and characterization of spontaneous rat heart endothelial cell lines.
AUTHOR: Derhaag J G; Duijvestijn A M; Emeis J J; Engels W; van Breda Vriesman P J
CORPORATE SOURCE: Department of Immunology, University of Limburg, Maastricht, The Netherlands.
SOURCE: LABORATORY INVESTIGATION, (1996 Feb) 74 (2) 437-51. Journal code: KZ4; 0376617. ISSN: 0023-6837.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199701
ED Entered STN: 19970128
Last Updated on STN: 19980206
Entered Medline: 19970109
AB . . . and RHEC-11. These lines were stable for more than 30 passages (RHEC-3 for more than 100). The cell lines were tumorigenic and developed hemangiomas on in vivo injection. All three lines expressed major histocompatibility complex (MHC) class I but no MHC class II. Intercellular adhesion molecule 1 was only expressed by RHEC-3. Cytokine stimulation induced vascular cell adhesion molecule 1 in RHEC-3 and RHEC-11 as well as MHC class II in all three lines in different. . . of endothelin and high levels of tissue plasminogen activator; they produced little (after stimulation with phorbol-ester PMA) or no von Willebrand factor. The RHEC lines produced thromboxane A2 but no prostacyclin; on stimulation with arachidonic acid and A23187, they produced prostaglandin. . .

L9 ANSWER 128 OF 215 MEDLINE DUPLICATE 104
ACCESSION NUMBER: 96200814 MEDLINE
DOCUMENT NUMBER: 96200814 PubMed ID: 8613463
TITLE: Fibroblast growth factor and heparin protect endothelial cells from the effects of interleukin 1.
AUTHOR: Minter A J; Keoshkerian E; Chesterman C N; Dawes J
CORPORATE SOURCE: Centre for Thrombosis and Vascular Research, University of New South Wales, Prince of Wales Hospital, Sydney, Australia.
SOURCE: JOURNAL OF CELLULAR PHYSIOLOGY, (1996 May) 167 (2) 229-37. Journal code: HNB; 0050222. ISSN: 0021-9541.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199606
ED Entered STN: 19960613
Last Updated on STN: 19980206
Entered Medline: 19960604
AB Vascular endothelium is involved in both active and passive processes in haemostasis, but inflammatory cytokines such as interleukin 1 (IL-1) and tumour necrosis factor (TNF) have been reported to convert the comparatively inert endothelial cell to an inflammatory state. Acidic fibroblast growth. . . included for 24 h. The following day the cells were washed and measurements made of the release of prostacyclin, von Willebrand factor, plasminogen activator inhibitor type 1, and thrombospondin, both in the resting state and following stimulation for 60 min with. . . thrombin. Tissue-type plasminogen activator was assayed in HUVEC lysates. Similar experiments were performed to assess effects on the expression of vascular adhesion molecule, intracellular adhesion molecule, and E-selectin using an ELISA on cells in situ. This study indicates that aFGF/heparin in. . .

L9 ANSWER 129 OF 215 MEDLINE DUPLICATE 105
ACCESSION NUMBER: 96200709 MEDLINE
DOCUMENT NUMBER: 96200709 PubMed ID: 8615611
TITLE: Interrelationships between microvessel density, expression of VEGF and resistance to doxorubicin of non-small lung cell carcinoma.

AUTHOR: Volm M; Koomagi R; Mattern J
CORPORATE SOURCE: German Cancer Research Center, Heidelberg, Germany.
SOURCE: ANTICANCER RESEARCH, (1996 Jan-Feb) 16 (1) 213-7.
Journal code: 59L; 8102988. ISSN: 0250-7005.
PUB. COUNTRY: Greece
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199606
ED Entered STN: 19960613
Last Updated on STN: 19960613
Entered Medline: 19960605

AB . . . to a number of antineoplastic agents. Since vessel density may be considered as an indirect measure of the oxygenation of tumours, in this study we analysed the relationship between tumour **vascularity** or **vascular** endothelial growth factor (VEGF) expression and drug resistance. **Tumour** specimens of 152 non-small cell lung carcinomas (NSCLC) of previously untreated patients were analysed for microvessel density by staining with factor VIII (von **Willebrand** factor) antibody and for expression of **vascular** endothelial growth factor (VEGF) using an anti-VEGF-antibody. Both proteins were determined by immunohistochemistry and the expression was compared with the resistance to doxorubicin measured in vitro. Microvessel density was significantly reduced in resistant **tumours** when compared with sensitive **tumours**. Of the 98 **tumours** with low microvessel density 83 (85%) were resistant; whereas of the 54 **tumours** with high microvessel density only 34 (63%) were resistant ($p = 0.004$). Expression of VEGF was significantly lower in resistant than in sensitive lung carcinomas. Of the 102 **tumors** with low expression of VEGF, 87 (85%) were resistant; whereas of the 50 **tumors** with high expression only 30 (60%) were resistant ($p = 0.0009$). Corresponding results were obtained when the analysis was restricted. . . VEGF expression and clinical data (stage, histology, metastasis) revealed no significant interrelationships. These data show clearly that poor microvessel density (**vascularisation**) and reduced expression of VEGF are linked with resistance to doxorubicin.

L9 ANSWER 130 OF 215 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 1996:392675 BIOSIS
DOCUMENT NUMBER: PREV199699115031
TITLE: Vascular endothelium lesion in patients undergoing bone marrow transplantation.
AUTHOR(S): Richard, Sophie (1); Seigneur, Martine (1); Blann, Andrew D.; Adams, Rachel; Amiral, Jean; Puntous, M. (1); Boiron, J. M. (1); Boisseau, M. R. (1); Reiffers, Josy (1); Boisseau, Michel (1)
CORPORATE SOURCE: (1) Univ. Bordeaux II, Bordeaux France
SOURCE: British Journal of Haematology, (1996) Vol. 93, No. SUPPL. 2, pp. 173.
Meeting Info.: Second Meeting of the European Haematology Association Paris, France May 29-June 1, 1996
ISSN: 0007-1048.
DOCUMENT TYPE: Conference
LANGUAGE: English
IT . . . Descriptors
BONE MARROW TRANSPLANTATION; ICAM-1; INTRACELLULAR ADHESION MOLECULE-1; MEDICAL SCIENCES/HUMAN MEDICINE/HEMATOLOGY; MEETING ABSTRACT; PATIENT; PLASMA LEVEL; SOLUBLE THROMBOMODULIN; THERAPEUTIC METHOD; **TUMOR** NECROSIS FACTOR-ALPHA; **VASCULAR** DISEASE; **VASCULAR** ENDOTHELIUM LESION; VON **WILLEBRAND** FACTOR

L9 ANSWER 131 OF 215 MEDLINE DUPLICATE 106
ACCESSION NUMBER: 97025970 MEDLINE
DOCUMENT NUMBER: 97025970 PubMed ID: 8872149
TITLE: Thrombomodulin as a marker of vascular and lymphatic tumours.
AUTHOR: Appleton M A; Attanoos R L; Jasani B
CORPORATE SOURCE: Department of Pathology, University of Wales College of Medicine, Cardiff, UK.
SOURCE: HISTOPATHOLOGY, (1996 Aug) 29 (2) 153-7.
Journal code: GB4; 7704136. ISSN: 0309-0167.
PUB. COUNTRY: ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199701
ED Entered STN: 19970219
Last Updated on STN: 19980206
Entered Medline: 19970121

AB . . . antibody to thrombomodulin as an endothelial marker in formalin-fixed paraffin-embedded tissue. The expression of thrombomodulin in a variety of 50 **vascular** and lymphatic neoplasms and malformations was compared to the expression of von **Willebrand** factor, QBend 10 (CD34) and JC70 (CD31). We showed that thrombomodulin was the best marker of lymphatic endothelium and also stained a higher percentage of malignant vasoformative **tumours** when compared to the other markers. We recommend the assessment of thrombomodulin expression in the differential diagnosis of malignant vasoformative neoplasms and in the detection of lymphatic endothelium for evidence of **tumour** permeation.

L9 ANSWER 132 OF 215 MEDLINE DUPLICATE 107
ACCESSION NUMBER: 1998029518 MEDLINE
DOCUMENT NUMBER: 98029518 PubMed ID: 9384693
TITLE: Towards endothelial-cell-directed cancer immunotherapy: in vitro expression of human recombinant cytokine genes by human and mouse primary endothelial cells.
AUTHOR: Ojeifo J O; Su N; Ryan U S; Verma U N; Mazumder A; Zwiebel J A
CORPORATE SOURCE: Department of Medicine, Georgetown University, Washington, DC , USA.
CONTRACT NUMBER: 2P30-CA-51008 (NCI)
CA53922 (NCI)
HL46029 (NHLBI)
SOURCE: CYTOKINES AND MOLECULAR THERAPY, (1996 Jun) 2 (2) 89-101.
Journal code: CN2; 9509183. ISSN: 1355-6568.
PUB. COUNTRY: ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199712
ED Entered STN: 19980109
Last Updated on STN: 19980109

Entered Medline: 19971208

AB . . . demonstrated the feasibility of cytokine gene transfer to enhance the antitumor activities of host immune cells. Endothelial cells forming the vascular supply of tumors may be useful vehicles for the delivery of cytokine molecules in order to effect tumor immunotherapy. In order to determine whether primary endothelial cells can express cytokine transgenes efficiently, we constructed two retroviral vectors containing. . . The cytokine-gene-transduced endothelial cells retained other endothelial cell features, including uptake of acetylated low-density lipoprotein (Ac-LDL) and expression of von Willebrand factor, and were euploid as shown by flow cytometry. These results demonstrate that endothelial cells, by sustaining the production of. . . active rhIL-2 at levels that are sufficient for the activation of potent cytotoxic lymphocyte activity, may be useful agents for cancer gene therapy.

L9 ANSWER 133 OF 215 MEDLINE DUPLICATE 108
ACCESSION NUMBER: 96154151 MEDLINE
DOCUMENT NUMBER: 96154151 PubMed ID: 8569199
TITLE: The temporal and spatial vascular endothelial growth factor expression in retinal vasculogenesis of rat neonates.
AUTHOR: Murata T; Nakagawa K; Khalil A; Ishibashi T; Inomata H; Sueishi K
CORPORATE SOURCE: Department of Ophthalmology, Faculty of Medicine, Kyushu University, Fukuoka, Japan.
SOURCE: LABORATORY INVESTIGATION, (1996 Jan) 74 (1) 68-77.
Journal code: KZ4; 0376617. ISSN: 0023-6837.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199603
ED Entered STN: 19960315
Last Updated on STN: 19960315
Entered Medline: 19960304

AB Vascular endothelial growth factor (VEGF) has been identified as an endothelial cell-specific mitogen with potent angiogenic properties. VEGF is overexpressed in pathologic angiogenesis observed in tumor growth, rheumatoid arthritis, and retinal angiogenic diseases such as diabetic retinopathy and retinopathy of prematurity. VEGF expression in physiologic angiogenesis,. . . To identify the cell types of VEGF-expressing cells, immunohistochemistry for cell markers such as glial fibrillary acidic protein and von Willebrand factor was performed. On postnatal days 3 and 7, when retinal vasculogenesis was active, VEGF mRNA and protein(s) were prominently. . .

L9 ANSWER 134 OF 215 MEDLINE DUPLICATE 109
ACCESSION NUMBER: 96360013 MEDLINE
DOCUMENT NUMBER: 96360013 PubMed ID: 8738420
TITLE: Lymphocyte adhesion to endothelium derived from human lymphoid tissue.
AUTHOR: Castro A; Bono M R; Simon V; Rosemblatt M
CORPORATE SOURCE: Departmento de Biologia, Facultad de Ciencias, Universidad de Chile, Santiago/Chile.
SOURCE: EUROPEAN JOURNAL OF CELL BIOLOGY, (1996 May) 70 (1) 61-8.
Journal code: EM7; 7906240. ISSN: 0171-9335.
PUB. COUNTRY: GERMANY: Germany, Federal Republic of
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199610
ED Entered STN: 19961022
Last Updated on STN: 19961022
Entered Medline: 19961010

AB . . . to migrate into secondary lymphoid organs. The first step in the process of lymphocyte extravasation involves lymphocyte binding to the vascular endothelium. Although several adhesion receptors have been implicated in the migration of lymphocytes to inflamed tissue, their role in the. . . we isolated a population of cells that we show by FACScan analysis to present the intracellular endothelial cell marker Von Willebrand factor and LVAP-2, a surface molecule present in venules from lymphoid organs. The cells are negative for FDC, IDC and. . . lymphoid cells via VLA-4. The mAb HP2/1 directed to the integrin VLA-4 blocks adhesion of Ramos and Daudi cells to tumor necrosis factor alpha (TNF-alpha)-treated HUVEC and to untreated TEC but not of tonsil-derived MNC. On the other hand, an anti-VCAM-1. . .

L9 ANSWER 135 OF 215 MEDLINE DUPLICATE 110
ACCESSION NUMBER: 96163363 MEDLINE
DOCUMENT NUMBER: 96163363 PubMed ID: 8590955
TITLE: Characterization of adhesion receptors on cultured microvascular endothelial cells derived from the retroorbital connective tissue of patients with Grave's ophthalmopathy.
COMMENT: Comment in: Eur J Endocrinol. 1996 Jan;134(1):9-11
AUTHOR: Heufelder A E; Scriba P C
CORPORATE SOURCE: Molecular Thyroid Research Unit, Medizinische Klinik, Klinikum Innenstadt, Ludwig-Maximilians Universitat, Munchen, Germany.
SOURCE: EUROPEAN JOURNAL OF ENDOCRINOLOGY, (1996 Jan) 134 (1) 51-60.
Journal code: BXU; 9423848. ISSN: 0804-4643.
PUB. COUNTRY: Norway
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199604
ED Entered STN: 19960418
Last Updated on STN: 19960418
Entered Medline: 19960401

AB . . . Recruitment of T cells to the retroorbital tissue in GO involves the activation of certain adhesion molecules both in the vascular endothelium and in the extravascular connective tissue within the retroorbital space. To characterize the interactions between orbital endothelial cells (OECs). . . small quantities of retroorbital connective tissue. Endothelial origin of the resulting cell populations was confirmed by positive immunoreactivity for von Willebrand factor. CD31 and thrombomodulin. Under baseline conditions, GO-OECs, but not normal OECs, expressed intercellular adhesion molecule 1 (ICAM-1) and CD44 immunoreactivity but no immunoreactivity for endothelial leukocyte adhesion molecule 1 (ELAM-1) and vascular cell adhesion molecule 1 (VCAM-1) was detected. Exposure of GO-OEC and normal OEC monolayers to interferon gamma, interleukin 1 alpha and tumor necrosis factor

alpha resulted in marked up-regulation of immunoreactivity for ICAM-1 and in induction of ELAM-1 and VCAM-1. Blocking experiments. . .

L9 ANSWER 136 OF 215 MEDLINE DUPLICATE 111
ACCESSION NUMBER: 96415785 MEDLINE
DOCUMENT NUMBER: 96415785 PubMed ID: 8818692
TITLE: An immunohistochemical study of tumour vessels in metastatic liver cancers and the surrounding liver tissue.
AUTHOR: Terayama N; Terada T; Nakanuma Y
CORPORATE SOURCE: Second Department of Pathology, Kanazawa University School of Medicine, Japan.
SOURCE: HISTOPATHOLOGY, (1996 Jul) 29 (1) 37-43.
Journal code: GB4; 7704136. ISSN: 0309-0167.
PUB. COUNTRY: ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199701
ED Entered STN: 19970219
Last Updated on STN: 19970219
Entered Medline: 19970131

AB . . . elucidate the phenotype of the blood vessels and the expression of the growth factors involved in angiogenesis in metastatic liver **cancers**, we carried out an immunohistochemical study of 57 surgically resected livers with metastatic **cancer**. Blood vessels in the metastatic liver **cancers** frequently expressed von **Willebrand** factor (**vWF**), Ulex europaeus agglutinin I (UEA I)-binding sites, alpha-smooth muscle actin (alpha-SMA), type IV collagen and laminin. Sinusoidal endothelial cells around the metastatic liver **cancers** were positive for **vWF** in 33.3% of the specimens examined and for UEA I in 28.1%. alpha-SMA-positive perisinusoidal cells accumulated in the vicinity of the metastatic liver **cancers** in 68.4% of the specimens. Type IV collagen was detected in the perisinusoidal space close to the metastatic **cancers** as well as distant from them (91.2%). Laminin was detected in the perisinusoidal space in only one specimen (1.8%). **Tumour** cells of the metastatic liver **cancers** were positive for **vascular** endothelial growth factor, basic fibroblast growth factor (bFGF), and acidic fibroblast growth factor (aFGF) in 78.9%, 38.4% and 7.0% of the specimens, respectively. Hepatocytes close to the metastatic liver **cancers** expressed bFGF more strongly than those distant from the metastatic liver **cancers**, and their expression of bFGF was more intense than that in the **tumour** cells. These results suggest that: (1) **tumour** vessels in metastatic liver **cancers** consist of endothelium, basement membrane and pericytes, (2) the sinusoids adjacent to **tumours** undergo capillarization, and (3) **vascular** endothelial growth factor may contribute to angiogenesis in metastatic liver **cancer**. Basic fibroblast growth factor may be responsible for the sinusoidal capillarization and the peritumoral fibrosis.

L9 ANSWER 137 OF 215 MEDLINE
ACCESSION NUMBER: 96288152 MEDLINE
DOCUMENT NUMBER: 96288152 PubMed ID: 8689765
TITLE: Endothelial cell activation in cutaneous vasculitis.
AUTHOR: Jurd K M; Stephens C J; Black M M; Hunt B J
CORPORATE SOURCE: Department of Haematology, St Thomas' Hospital, London, UK.
SOURCE: CLINICAL AND EXPERIMENTAL DERMATOLOGY, (1996 Jan) 21 (1) 28-32.
Journal code: DDU; 7606847. ISSN: 0307-6938.
PUB. COUNTRY: ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199608
ED Entered STN: 19960911
Last Updated on STN: 19960911
Entered Medline: 19960826

AB . . . levels of tissue plasminogen activator antigen (t-PA:Ag), plasminogen activator inhibitor type 1 antigen (PAI-1:Ag) and PAI-1 activity, fibrin plate, von **Willebrand** factor antigen ( **vWF**:Ag), tissue factor (TF) and soluble thrombomodulin (sTM) were measured. In comparison with the control group (n = 20) there was a significant increase in t-PA:Ag, **vWF**:Ag and TF ($P < 0.05$, Mann-Whitney U-test) in the cutaneous vasculitis group. This study confirms that measurable degrees of endothelial. . . to endothelial cells has been reported in a small number of patients with giant cell arteritis and Takayasu's arteritis. The **vascular** endothelium plays a central part in the control of haemostasis. Under physiological conditions endothelial cells present an anticoagulant surface to. . . thrombin which then activates protein C. Activated protein C together with a cofactor, protein S, inactivates FVa and FVIIIa. von **Willebrand** factor (**vWF**) is synthesized by endothelial cells, stored in Weibel-Palade bodies and released into the circulation upon endothelial stimulation. **vWF** mediates the binding of platelets to the subendothelium and is the carrier molecule for FVIIIC. The endothelium controls fibrinolysis by producing t-PA and its inhibitor PAI-1. Inflammatory cytokines such as interleukin-1 (IL-1) and **tumour** necrosis factor (TNF) activate endothelial cells, causing a shift from an antithrombotic to prothrombotic state, including expression of tissue factor,. . .

L9 ANSWER 138 OF 215 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 1996:491969 BIOSIS
DOCUMENT NUMBER: PREV199699214325
TITLE: Angiogenesis and inflammation in invasive carcinoma of the breast.
AUTHOR(S): Lee, A. H. S.; Happerfield, L. C.; Bobrow, L. G.; Millis, R. R.
CORPORATE SOURCE: ICRF Clinical Oncol. Unit, Guy's Hosp., London SE1 9RT UK
SOURCE: Journal of Pathology, (1996) Vol. 179, No. SUPPL., pp. 2A.
Meeting Info.: 173rd Meeting of the Pathological Society of Great Britain and Ireland Southampton, England, UK July 10-12, 1996
ISSN: 0022-3417.
DOCUMENT TYPE: Conference
LANGUAGE: English
IT Miscellaneous Descriptors
C-ERBB-2; CD20; CD3; CD45RA; CD45RO; CD68; CD8; IMMUNOHISTOCHEMISTRY; MACROPHAGE; MEETING ABSTRACT; T CELL; **TUMOR** **VASCULARITY**; VON **WILLEBRAND** FACTOR

L9 ANSWER 139 OF 215 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1995:630126 CAPLUS
DOCUMENT NUMBER: 123:54152
TITLE: Endothelial-monocyte activating polypeptide II, its human and murine cDNA sequence, and its cytokine activity for host response and tumor regression
INVENTOR(S): Stern, David M.; Clauss, Matthias; Kao, Janet; Kayton, Mark; Libutti, Steven K.
PATENT ASSIGNEE(S): Trustees of Columbia University in the City of New York, USA
SOURCE: PCT Int. Appl., 181 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 9509180 | A1 | 19950406 | WO 1994-US11085 | 19940929 |
| W: AU, CA, JP, US | | | | |
| RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| US 5641867 | A | 19970624 | US 1993-129456 | 19930929 |
| CA 2172729 | AA | 19950406 | CA 1994-2172729 | 19940929 |
| AU 9479615 | A1 | 19950418 | AU 1994-79615 | 19940929 |
| EP 721463 | A1 | 19960717 | EP 1994-930525 | 19940929 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE | | | | |
| JP 09505987 | T2 | 19970617 | JP 1994-510465 | 19940929 |

PRIORITY APPLN. INFO.: US 1993-129456 19930929
WO 1994-US11085 19940929

AB A purified endothelial monocyte activating polypeptide (EMAP II) is provided. Further provided are a method of obtaining purified EMAP II, a method of making antibodies to it, and a method for its detection. This invention also provides an effector cell activating protein which contains an amino acid sequence homologous to RIGRIVT and a method of detecting same. This invention also provides a method of treating a tumor in a subject by administering an ED of EMAP II. Thus, EMAP-II was initially identified in the supernatant of murine methylcholanthrene A-induced fibrosarcomas by its capacity to activate host effector cells. Based on its N-terminal protein sequence, a full-length cDNA was cloned which indicates that the precursor of EMAP II is a unique, leaderless, single polypeptide chain with predicted mol. mass .apprx.34 kDa and that the mature form released by Meth A cells corresponds to .apprx.20 kDa. Purified recombinant mature EMAP II activated endothelial cells with resulting elevation of cytosolic free calcium concn, release of von Willebrand factor, induction of tissue factor, and expression of the adhesion mols. E-selectin and P-selectin. Neutrophils exposed to EMAP II demonstrated elevated cytosolic free calcium concn., peroxidase generation, and chemotaxis. EMAP II also activated mononuclear phagocytes. Systemic infusion of EMAP II into C3H/HeJ or Balb/c mice was assocd. with systemic toxicity, pulmonary congestion, and the appearance of TNF, interleukin-1 and -6 in the plasma. A single intra-tumor injection of EMAP II into Meth A sarcomas induced acute thrombohemorrhage and partial tumor regression. Local injection of EMAP II into a tumor resistant to the effects of TNF, murine mammary carcinoma, rendered it sensitive to subsequently administered TNF, which resulted in acute thrombohemorrhage and partial regression. Thus, recombinant EMAP II, a tumor-derived cytokine, has properties of a proinflammatory mediator with the capacity to prime the tumor vasculature for a locally destructive process.

L9 ANSWER 140 OF 215 MEDLINE DUPLICATE 112
ACCESSION NUMBER: 95254444 MEDLINE
DOCUMENT NUMBER: 95254444 PubMed ID: 7537624
TITLE: Topography of neovascularity in human prostate carcinoma.
AUTHOR: Siegal J A; Yu E; Brawer M K
CORPORATE SOURCE: University of Washington, Seattle, USA.
CONTRACT NUMBER: DK45761-03 (NIDDK)
SOURCE: CANCER, (1995 May 15) 75 (10) 2545-51.
Journal code: CLZ; 0374236. ISSN: 0008-543X.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 199506
ED Entered STN: 19950615
Last Updated on STN: 19970203
Entered Medline: 19950608

AB . . . neoplasm and adjacent benign tissue. METHODS: Histologically benign and malignant tissues from 14 random radical prostatectomy specimens were studied. The tumor edge was defined precisely by immunohistochemistry, suggesting a high molecular weight cytokeratin that stains only the basal cells of benign histology. Microvascularity density quantification was performed using von Willebrand factor antigen immunohistochemistry as previously defined. Five parallel arcs were defined along which vessel density was calculated including arcs within,. . . edge, and removed from the neoplasm. RESULTS. In 13 of 14 cases, the highest vessel density was found within the tumor. Significant differences were observed between the edge of the tumor and 2.5 mm within the benign periphery, between the benign and malignant tissue at the border, and between CAP at. . . stepwise increase in MVD toward the center of the neoplasm. CONCLUSIONS. These data confirm the authors' previous observation that prostate cancer has approximately a two-fold increase in MVD compared with the benign tissue. Moreover, high vascularization of the center explains the rare finding of necrosis in CAP. These data suggest that angiogenic promoters may have their. . .

L9 ANSWER 141 OF 215 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 1996:64075 BIOSIS
DOCUMENT NUMBER: PREV199698636210
TITLE: Effects related to indomethacin prolonged survival and decreased tumor growth in a mouse tumor model with cytokine dependent cancer cachexia.
AUTHOR(S): Lonnroth, Christina; Svaninger, Gosta; Gelin, Johan; Cahlin, Christian; Iressjo, Britt-Marie; Cvetvkovska, Elisabet; Edstrom, Staffan; Andersson, Marianne; Svanberg, Elisabeth; Lundholm, Kent (1)
CORPORATE SOURCE: (1) Dep. Surgery, Sahlgrenska Univ. Hosp., S-413 45 Goteborg Sweden
SOURCE: International Journal of Oncology, (1995) Vol. 7, No. 6, pp. 1405-1413.
ISSN: 1019-6439.
DOCUMENT TYPE: Article

LANGUAGE: English
IT . . .
INTERLEUKIN 1-ALPHA; INTERLEUKIN 6; MELANOMA; PLATELET-DERIVED GROWTH FACTOR; PROSTAGLANDIN E-2 EXPRESSION; PUTRESCINE LEVELS; SPERMIDINE; SPERMINE; TRANSFERRIN RECEPTOR; TRANSFORMING GROWTH FACTOR-BETA-3; **TUMOR** NECROSIS FACTOR-ALPHA; **VASCULAR** ENDOTHELIAL GROWTH FACTOR; VON **WILLEBRAND** FACTOR III

L9 ANSWER 142 OF 215 MEDLINE DUPLICATE 113
ACCESSION NUMBER: 95188174 MEDLINE
DOCUMENT NUMBER: 95188174 PubMed ID: 7533661
TITLE: Up-regulation of vascular endothelial growth factor and its receptors in von Hippel-Lindau disease-associated and sporadic hemangioblastomas.
AUTHOR: Wizigmann-Voos S; Breier G; Risau W; Plate K H
CORPORATE SOURCE: Max-Planck-Institut fur physiologische und klinische Forschung, W.G. Kerckhoff-Institut, Abteilung Molekulare Zellbiologie, Bad Nauheim, Germany.
SOURCE: CANCER RESEARCH, (1995 Mar 15) 55 (6) 1358-64.
Journal code: CNF; 2984705R. ISSN: 0008-5472.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199504
ED Entered STN: 19950425
Last Updated on STN: 20000303
Entered Medline: 19950412
AB . . . the most frequent manifestation of the autosomal dominantly inherited von Hippel-Lindau (VHL) disease but also presents as a nonfamilial, sporadic **vascular tumor**. Hemangioblastomas are characterized by a dense network of capillaries in association with cysts. To investigate the mechanisms underlying neovascularization and cyst formation, we analyzed eight VHL disease-associated and five sporadic hemangioblastomas. Histologically, both **tumor** types showed a similar phenotype. The capillaries expressed the endothelial cell markers von **Willebrand** factor and CD31 antigen. We investigated the expression of **vascular** endothelial growth factor (VEGF), an endothelial cell-specific mitogen which is also known to induce **vascular** permeability in vivo, and its high affinity tyrosine kinase receptors flt-1 and KDR. Northern blot and in situ hybridization analysis. . . . revealed significant up-regulation of VEGF and VEGF receptor expression in VHL disease-associated and sporadic hemangioblastomas compared to normal brain and **tumor** stromal cells as sites of abundant VEGF transcription. Endothelial cells did not express detectable amounts of VEGF mRNA but coexpressed flt-1 and KDR. By immunohistochemistry, VEGF protein was detectable in the **tumor** interstitium and was found to be concentrated around capillaries. Performing reverse transcription-PCR, we demonstrated that VEGF121 and VEGF165 were the. . . and sporadic hemangioblastomas, VEGF121 and VEGF165 are secreted by stromal cells and interact with the corresponding VEGF receptors expressed on **tumor** endothelial cells. This paracrine mechanism may mediate neovascularization and cyst formation in capillary hemangioblastomas.

L9 ANSWER 143 OF 215 MEDLINE DUPLICATE 114
ACCESSION NUMBER: 95171390 MEDLINE
DOCUMENT NUMBER: 95171390 PubMed ID: 7532545
TITLE: Expression of vascular endothelial growth factor and its possible relation with neovascularization in human brain tumors.
AUTHOR: Samoto K; Ikezaki K; Ono M; Shono T; Kohno K; Kuwano M; Fukui M
CORPORATE SOURCE: Department of Biochemistry, Kyushu University School of Medicine, Fukuoka, Japan.
SOURCE: CANCER RESEARCH, (1995 Mar 1) 55 (5) 1189-93.
Journal code: CNF; 2984705R. ISSN: 0008-5472.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199503
ED Entered STN: 19950407
Last Updated on STN: 19960129
Entered Medline: 19950330
AB To examine which growth factors correlate with neovascularization in human brain **tumors**, the mRNA levels of transforming growth factor alpha, transforming growth factor beta, basic fibroblast growth factor, and **vascular** endothelial growth factor (VEGF) genes were determined by a Northern blot analysis in surgically obtained human gliomas and meningiomas. The **vascular** development was determined by counting the number of microvessels which were immunostained with von **Willebrand** factor. We normalized the growth factor mRNA levels versus the glyceraldehyde phosphate dehydrogenase mRNA level. In the 17 gliomas and. . . of VEGF, but not those of transforming growth factors alpha and beta and basic fibroblast growth factor, correlated significantly with **vascularity** in both gliomas (correlation coefficient $r = 0.499$; $P < 0.05$) and meningiomas (correlation coefficient $r = 0.779$; $P < 0.001$). These findings thus suggest that VEGF may be a positive factor in **tumor** angiogenesis in both human gliomas and meningiomas.

L9 ANSWER 144 OF 215 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 1996:264183 BIOSIS
DOCUMENT NUMBER: PREV199698820312
TITLE: Antioxidant and anti-inflammatory protection of vascular endothelial cells by synthetic mimics of glutathione peroxidase.
AUTHOR(S): Chaudiere, Jean (1); Moutet, Marc (1); D'Alessio, Patrizia
CORPORATE SOURCE: (1) OXIS International SA, 2 Avenue des Coquelicots, 94385 Bonneuil-sur-Marne, Paris France
SOURCE: Comptes Rendus des Seances de la Societe de Biologie et de ses Filiales, (1995) Vol. 189, No. 5, pp. 861-882.
ISSN: 0037-9026.
DOCUMENT TYPE: Article
LANGUAGE: French
SUMMARY LANGUAGE: French; English
IT . . .
HUMAN UMBILICAL VEIN ENDOTHELIAL CELL; HYDROPEROXIDE; INTERLEUKIN-1-ALPHA; INTERLEUKIN-8; LEUKOCYTE; LINOLEIC ACID HYDROPEROXIDE; MYELOPEROXIDASE; NADPH OXIDASE; OXIDATIVE STRESS; P-SELECTIN; POLYMORPHONUCLEAR NEUTROPHIL; **TUMOR** NECROSIS FACTOR-ALPHA; VASCULAR CELL ADHESION MOLECULE-1; VON

L9 ANSWER 145 OF 215 MEDLINE DUPLICATE 115
ACCESSION NUMBER: 95384481 MEDLINE
DOCUMENT NUMBER: 95384481 PubMed ID: 7655744
TITLE: A transformed murine myocardial vascular endothelial cell clone: characterization of cells in vitro and of tumours derived from clone in situ.
AUTHOR: Plendl J; Sinowatz F; Auerbach R
CORPORATE SOURCE: Institute for Veterinary Anatomy, University of Munich, Germany.
SOURCE: VIRCHOWS ARCHIV, (1995) 426 (6) 619-28.
Journal code: BZD; 9423843. ISSN: 0945-6317.
PUB. COUNTRY: GERMANY: Germany, Federal Republic of
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199510
ED Entered STN: 19951013
Last Updated on STN: 19951013
Entered Medline: 19951002

AB . . . histocompatible mice, clone MHEC5-T uniformly generated epithelioid haemangioendotheliomas. Clone MHEC5-T underwent significant additional alterations in addition to the acquisition of **tumour** -forming potential in vivo along with the diagnostic correlate of loss of cellular contact inhibition in vitro. Whereas the transformed cells. . . cell surface receptor(s) for acetylated low density lipoprotein and no longer bound antibodies to either angiotensin converting enzyme or von **Willebrand** factor-associated antigen. **Vascular** cell adhesion molecule-1 (VCAM-1), expressed constitutively on the parent clone, was down-regulated in the transformed cell line. The transformed cells. . .

L9 ANSWER 146 OF 215 MEDLINE DUPLICATE 116
ACCESSION NUMBER: 95283293 MEDLINE
DOCUMENT NUMBER: 95283293 PubMed ID: 7539238
TITLE: Expression of adhesion receptors in epidermal tumors: correlation with TNF alpha expressing cells.
AUTHOR: Viac J; Schmitt D; Claudy A
CORPORATE SOURCE: INSERM U346, Hopital E. Herriot, Lyon, France.
SOURCE: ANTICANCER RESEARCH, (1995 Mar-Apr) 15 (2) 551-5.
Journal code: 59L; 8102988. ISSN: 0250-7005.
PUB. COUNTRY: Greece
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199506
ED Entered STN: 19950707
Last Updated on STN: 19960129
Entered Medline: 19950623

AB The expression of intercellular adhesion molecule-1 (ICAM-1), endothelial leukocyte adhesion molecule-1 (E-selectin) and **vascular** cell adhesion molecule-1 (VCAM-1) was investigated in a series of basal cell carcinomas and squamous cell carcinomas in comparison to. . . viral-induced lesions (cutaneous warts, condyloma) and was correlated to the infiltration density and the presence of TNF alpha expressing cells. **Tumor** cells expressing ICAM-1 were frequently detected in squamous cell carcinoma and condyloma and were correlated with a dense infiltration of HLA-DR and LFA-1 positive cells. **Tumor** cells were devoid of ICAM-1 in other lesions. **Tumor** microvessels detected by Von **Willebrand** factor were consistently present but vessels expressing adhesion receptors were less frequent. E-selectin was usually intense and frequent, whereas VCAM-1 was rare except in dense infiltrated zones and in viral-induced lesions. In all samples, **tumor** cells strongly expressed TNF alpha. Though the cytotoxin has been reported to be an inducer of adhesion receptors, its expression in epidermal **tumors** did not correlate with a concomitant up-regulation of epithelial ICAM-1 or endothelial VCAM-1. This may contribute to a reduced influx of T cells into the **tumors**.

L9 ANSWER 147 OF 215 MEDLINE DUPLICATE 117
ACCESSION NUMBER: 96130565 MEDLINE
DOCUMENT NUMBER: 96130565 PubMed ID: 8569146
TITLE: Hemangiomas and hemangiosarcomas in inbred laboratory mice.
AUTHOR: Booth C J; Sundberg J P
CORPORATE SOURCE: BASF Bioresearch Corporation, Worcester, Massachusetts, USA.
CONTRACT NUMBER: CA 34196 (NCI)
SOURCE: LABORATORY ANIMAL SCIENCE, (1995 Oct) 45 (5) 497-502.
Journal code: KYS; 1266503. ISSN: 0023-6764.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199603
ED Entered STN: 19960315
Last Updated on STN: 19960315
Entered Medline: 19960307

AB Hemangiomas and hemangiosarcomas are rare, naturally developing **tumors** of blood vessels. In a retrospective study covering a period of 57 contiguous months between 1986 and 1991, four cavernous. . . At the time of submission, mice ranged in age from 100 to 434 days, with a mean of 217 days. **Tumors** principally affected the skin but were also diagnosed in the seminal vesicles, liver, muscle tissue, and cerebellum. Immunohistochemistry, with antisera directed against human von **Willebrand** factor (factor VIII-related antigen) as an endothelial cell marker, labeled mouse endothelial cells inconsistently. A monoclonal antibody directed against the smooth muscle actin isoform, but not the sarcomeric muscle actin isoform, outlined **vascular** structures in **tumors** and normal **vascular** smooth muscle in adjacent normal tissues.

L9 ANSWER 148 OF 215 MEDLINE DUPLICATE 118
ACCESSION NUMBER: 96035550 MEDLINE
DOCUMENT NUMBER: 96035550 PubMed ID: 7551008
TITLE: Angiomyofibroblastoma of the vulva: a clinicopathologic study of seven cases.
AUTHOR: Hisaoka M; Kouho H; Aoki T; Daimaru Y; Hashimoto H
CORPORATE SOURCE: Department of Pathology and Oncology, School of Medicine, University of Occupational and Environmental Health, Kitakyusyu, Japan.
SOURCE: PATHOLOGY INTERNATIONAL, (1995 Jul) 45 (7) 487-92.
Journal code: BXQ; 9431380. ISSN: 1320-5463.

PUB. COUNTRY: Australia
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199511
ED Entered STN: 19951227
Last Updated on STN: 19951227
Entered Medline: 19951107

AB . . . middle-aged women who had a slowly growing mass, measuring 1.5-6 cm in maximum dimension, located subcutaneously in the vulva. The **tumors** were well-demarcated and characterized by well-**vascularized**, alternating hypercellular and hypocellular edematous areas composed of bland, plump spindle- or oval-shaped stromal cells frequently aggregated around small blood. . . positive for vimentin and desmin, but negative for muscle specific actin, alpha-smooth muscle actin, myosin, cytokeratins, S-100 protein or von **Willebrand** factor. Ultrastructurally, the plump stromal cells had a small amount of peripherally located rough endoplasmic reticulum, numerous pinocytotic vesicles and. . .

L9 ANSWER 149 OF 215 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1995:720753 CAPLUS
DOCUMENT NUMBER: 123:141384
TITLE: Effect of TNF-.alpha., Shiga toxin and calcium ionophore on Weibel-Palade body content of endothelial cells: possible implications for the hemolytic uremic syndrome
AUTHOR(S): Kaye, Susan A.; Obrig, Tom G.
CORPORATE SOURCE: Dep. Microbiol. Immunology, Univ. Rochester, Rochester, NY, 14642, USA
SOURCE: Thromb. Res. (1995), 79(4), 415-21
CODEN: THBRAA; ISSN: 0049-3848
DOCUMENT TYPE: Journal
LANGUAGE: English

AB To explore the possibility that large multimers of von **Willebrand** factor may be released from endothelium during hemolytic uremic syndrome, the authors assessed the effect of Shiga toxin, TNF-.alpha., and calcium ionophore on Weibel-Palade body content of cultured endothelial cells using immunofluorescence microscopy. Exposure to **tumor** necrosis factor-.alpha. for 24 h decreased the Weibel-Palade body content of human **vascular** endothelial cells and lowered the concn. of calcium ionophore required for redn. in Weibel-Palade bodies. In contrast, Shiga toxin given for 4 h after TNF-.alpha. preincubation had no effect on Weibel-Palade body content.

L9 ANSWER 150 OF 215 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 96120634 EMBASE
DOCUMENT NUMBER: 1996120634
TITLE: [Microvascularization of the stroma in carcinoma of the cervix].
MICROVASCULARISATION DU STROMA DES CANCERS EPIDERMOIDES DU COL UTERIN.
AUTHOR: Neu-Janicki A.M.; Audouin J.; Poitout P.; Diebold J.
CORPORATE SOURCE: Service de Gynecologie-Obstetrique, Hotel Dieu,75181 Paris Cedex 04, France
SOURCE: Gynecologie - Revue du Gynecologue, (1995) 3/8 (388-395).
ISSN: 1250-3347 CODEN: GRGYEL
COUNTRY: France
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 010 Obstetrics and Gynecology
016 Cancer
LANGUAGE: French
SUMMARY LANGUAGE: French; English

AB Neoangiogenesis is induced in carcinoma by a series of growth factors including angiogenic factors secreted by the **tumour** cells and elements of the host tissue forming the stroma of the **tumour**. We examined the different tissues of the cervix to compare the degree of stroma **vascularization** in healthy tissues with those of micro-invasive and invasive malignant epidermoid **tumours** and compared to results with those obtained with anti-CD34 antibodies and anti-factor VIII. The **vascular** endothelial cells were coloured red with an immunohistochemistry method. An Olympus microscope operating at a 200 x magnification over a. . . 8 normal cases were used as controls. The number of micro-vessels with endothelial cells coloured red by expression of the **Willebrand** factor or the CD34 molecule were counted. There was a significant difference between **vascularization** in the stroma of the normal cervix and in invasive epidermoid carcinoma as in micro-invasive carcinoma. The degree of **vascularization** in the **tumoural** stroma depended on the degree of micro-invasion. There was no correlation with prognosis.

L9 ANSWER 151 OF 215 MEDLINE DUPLICATE 119
ACCESSION NUMBER: 95323193 MEDLINE
DOCUMENT NUMBER: 95323193 PubMed ID: 7599842
TITLE: Pulmonary edema during IL-2 therapy: combined effect of increased permeability and hydrostatic pressure.
AUTHOR: Berthiaume Y; Boiteau P; Fick G; Kloiber R; Sinclair G D; Fong C; Poon M C; Lafreniere R
CORPORATE SOURCE: Department of Medicine, University of Calgary, Alberta, Canada.
SOURCE: AMERICAN JOURNAL OF RESPIRATORY AND CRITICAL CARE MEDICINE, (1995 Jul) 152 (1) 329-35.
Journal code: BZS; 9421642. ISSN: 1073-449X.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 199508
ED Entered STN: 19950822
Last Updated on STN: 19950822
Entered Medline: 19950810

AB Systemic administration of recombinant interleukin-2 (rIL-2) has been shown to be promising against certain metastatic **cancers**. However, major side effects, such as pulmonary edema, have limited its widespread use. Although this pulmonary edema has been attributed to a **vascular** leak syndrome, this hypothesis has not been verified in humans. The purpose of our study was to determine both the. . . serially measured in each patient the lung clearance of technetium 99m-diethylenetriamine pentaacetic acid (DTPA) 99mTc-DTPA), the plasma levels of Von **Willebrand** factor antigen, and the pulmonary capillary wedge pressure (PCWP). Our results show that there was a gradual increase in the. . . increase in A-aDO2 over its baseline value. During rIL-2 treatment, 99mTc-DTPA clearance was augmented, and the plasma

concentration of Von Willebrand factor antigen was elevated. PCWP climbed from 7 to 14 mm Hg and serum total protein fell from 66.1 to. . .

L9 ANSWER 152 OF 215 MEDLINE DUPLICATE 120
ACCESSION NUMBER: 95404393 MEDLINE
DOCUMENT NUMBER: 95404393 PubMed ID: 7674090
TITLE: VWF release and platelet aggregation in human melanoma after perfusion with TNF alpha.
AUTHOR: Renard N; Nooijen P T; Schalkwijk L; De Waal R M; Eggermont A M; Lienard D; Kroon B B; Lejeune F J; Ruiter D J
CORPORATE SOURCE: Department of Pathologic Anatomy, Jules Bordet Institute, University of Brussels, Belgium.
SOURCE: JOURNAL OF PATHOLOGY, (1995 Jul) 176 (3) 279-87. Journal code: JLB; 0204634. ISSN: 0022-3417.
PUB. COUNTRY: ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199510
ED Entered STN: 19951026
Last Updated on STN: 19951026
Entered Medline: 19951018

AB Twenty-nine stage IIIA/B melanoma patients treated by isolated limb perfusion (ILP) with a high dose of recombinant human **tumour** necrosis factor alpha (rHuTNF alpha), interferon gamma (IFN gamma), and melphalan were histologically documented with emphasis on therapy-induced changes of the **tumour vasculature**. Sequential biopsies were taken at various intervals before and after the treatment to compare the morphological change. In order to visualize microvascular changes, immunostaining was performed for von **Willebrand** factor ( **VWF**), type IV collagen, alpha-smooth muscle actin, endothelial antigen PAL-E, tissue factor, CD41 (thrombocyte marker), and fibrin. In biopsies prior to. . . haemorrhage, and fibrin thrombi were not found. Within 3 h following triple combination therapy, a change in the distribution of **VWF** staining occurred, from a discrete endothelial pattern in the untreated lesions to a fuzzy perivascular and subepidermal pattern in the. . . that the thrombocyte aggregation observed is not caused by local procoagulant activity, but is rather the result of the therapy-associated **vascular** damage or haemostasis. Although it is difficult to derive the dynamics of this process from static images, we assume that TNF alpha induced endothelial cell damage, leading to **VWF** release. Release **VWF** may play a role in the adhesion between thrombocytes and the damaged endothelium or the denuded subendothelium. As a consequence,. . .

L9 ANSWER 153 OF 215 MEDLINE DUPLICATE 121
ACCESSION NUMBER: 95268105 MEDLINE
DOCUMENT NUMBER: 95268105 PubMed ID: 7538358
TITLE: Relationship between staining by digital subtraction angiography and **vascularity** in breast **cancer**: analysis of the time-density curve and the results of staining for factor VIII-related antigen/von **Willebrand** factor.
AUTHOR: Watanabe O; Haga S; Shimizu T; Imamura H; Kobayashi K; Kinoshita J; Kajiwara T; Fujibayashi M
CORPORATE SOURCE: Department of Surgery, Tokyo Women's Medical College Daini Hospital, Japan.
SOURCE: BREAST CANCER RESEARCH AND TREATMENT, (1995 Mar) 33 (3) 269-73. Journal code: A8X; 8111104. ISSN: 0167-6806.
PUB. COUNTRY: Netherlands
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199506
ED Entered STN: 19950629
Last Updated on STN: 19960129
Entered Medline: 19950622

TI Relationship between staining by digital subtraction angiography and **vascularity** in breast **cancer**: analysis of the time-density curve and the results of staining for factor VIII-related antigen/von **Willebrand** factor.
AB We performed intravenous digital subtraction angiography (IV-DSA) in 31 patients with primary invasive breast **cancer**, and calculated the maximum density of **tumor** staining from the time-density curve obtained. Specimens resected from the same patients were stained for factor VIII-related antigen/von **Willebrand** factor (**vWF** ), and the amount of microvessels was calculated by image processing. A significant correlation (correlation coefficient: 0.85) was found between the maximum density of **tumor** staining and the **vascularity** determined by staining for **vWF**, indicating that the maximum density indirectly reflects the **vascularity** in the **tumor**.

L9 ANSWER 154 OF 215 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 95355531 EMBASE
DOCUMENT NUMBER: 1995355531
TITLE: A comparative study of immunomarkers for lymphangiomas and hemangiomas.
AUTHOR: Suthipintawong C.; Leong A.S.-Y.; Vinyuvat S.
CORPORATE SOURCE: Division of Tissue Pathology, Inst. Med./Veterinary Science, PO Box 14, Rundle Mall,Adelaide, SA 5000, Australia
SOURCE: Applied Immunohistochemistry, (1995) 3/4 (239-244). ISSN: 1062-3345 CODEN: APIMEH
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 005 General Pathology and Pathological Anatomy
LANGUAGE: English
SUMMARY LANGUAGE: English

AB Forty-nine cases of benign blood vessel (n = 30) and lymphatic **tumors** (n = 19), along with nonlesional tissues, were examined for von **Willebrand** factor (vWP), Ulex europaeus agglutinin-I lectin (UEA-I), CD31, and CD34, as well as for the basal lamina components type IV collagen and laminin, to determine the sensitivity of these markers as discriminants for the two types of **vascular** channels. In addition, anti-factor XIIIa (anti-FXIIIA) and HLA-DR antibodies were used to label pericytes. None of these markers was found to be an absolute discriminant, with endothelial cells of both blood vessels and lymphatics staining for vWF, UEA-I, CD31, and CD34; staining was of slightly greater intensity and consistency in blood vessels for CD31 and CD34. Basal. . .

L9 ANSWER 155 OF 215 MEDLINE DUPLICATE 122
ACCESSION NUMBER: 95221024 MEDLINE
DOCUMENT NUMBER: 95221024 PubMed ID: 7535752
TITLE: Suppression of pulmonary metastasis by angiogenesis inhibitor TNP-470 in murine osteosarcoma.
AUTHOR: Mori S; Ueda T; Kuratsu S; Hosono N; Izawa K; Uchida A
CORPORATE SOURCE: Department of Orthopedic Surgery, Center for Adult Diseases, Osaka, Japan.
SOURCE: INTERNATIONAL JOURNAL OF CANCER, (1995 Mar 29) 61 (1) 148-52.
Journal code: GQU; 0042124. ISSN: 0020-7136.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199505
ED Entered STN: 19950518
Last Updated on STN: 19970203
Entered Medline: 19950509
AB . . . to evaluate the efficacy of this compound in the suppression of pulmonary metastasis of osteosarcoma. In an in vivo experiment, **tumor** cells were inoculated i.v. into C3H mice, and TNP-470 or vehicle alone (control group) was administered s.c. every day for. . . both the number of pulmonary metastatic nodules and the lung wet weight were significantly reduced in a dose-dependent manner. Similarly, **vascular** density in the metastatic **tumors** estimated by immunohistochemical staining with anti-von-**Willebrand** factor antibody as an endothelial marker were significantly reduced. No severe side-effects were found. In an in vitro experiment, viable **tumor** cells were counted after 3 days' treatment with TNP-470. The 50% inhibitory concentration was 0.6 ng/ml for LM8, which was more sensitive than other **tumor** cells previously reported. Our results show that TNP-470 suppresses the pulmonary metastasis of LM8 and suggest that both its anti-angiogenic. . .

L9 ANSWER 156 OF 215 MEDLINE DUPLICATE 123
ACCESSION NUMBER: 95198167 MEDLINE
DOCUMENT NUMBER: 95198167 PubMed ID: 7891227
TITLE: Expression of VE (vascular endothelial)-cadherin and other endothelial-specific markers in haemangiomas.
AUTHOR: Martin-Padura I; De Castellarnau C; Uccini S; Pilozzi E; Natali P G; Nicotra M R; Ughi F; Azzolini C; Dejana E; Ruco L
CORPORATE SOURCE: Instituto di Ricerche Farmacologiche Mario Negri, Milano, Italy.
SOURCE: JOURNAL OF PATHOLOGY, (1995 Jan) 175 (1) 51-7.
Journal code: JLB; 0204634. ISSN: 0022-3417.
PUB. COUNTRY: ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199504
ED Entered STN: 19950427
Last Updated on STN: 19950427
Entered Medline: 19950418
AB Haemangiomas are **vascular tumours** characterized by rapid growth and increased endothelial turnover. VE-cadherin is a recently discovered endothelial cell-specific cadherin located at intercellular junctions. In different types of epithelial **tumours**, cadherin expression is inversely correlated with invasiveness and metastatic dissemination. In this immunohistochemical study, VE-cadherin expression has been analysed in. . . and angiosarcoma. The antigenic profile of most haemangioma cells was similar to that of normal endothelium. CD31, CD34, ICAM-1, von **Willebrand** factor, and VLA integrins were expressed in haemangioma endothelium; in addition, the major components of **vascular** basement membrane, namely fibronectin, collagen type IV, and laminin, were correctly expressed and organized. Surprisingly, a marked reactivity for the. . . the basement membranes of two juvenile capillary haemangiomas. Overall, this study shows that, with the exception of angiosarcoma and haemangionendothelioma, **vascular tumours** maintain most of the differentiation characteristics of normal endothelium. This encourages speculation that in these pathologies, abnormal endothelial proliferation is. . .

L9 ANSWER 157 OF 215 MEDLINE DUPLICATE 124
ACCESSION NUMBER: 95014290 MEDLINE
DOCUMENT NUMBER: 95014290 PubMed ID: 7929199
TITLE: Characterization of a novel tumor-derived cytokine. Endothelial-monocyte activating polypeptide II.
AUTHOR: Kao J; Houck K; Fan Y; Haehnel I; Libutti S K; Kayton M L; Grikscheit T; Chabot J; Nowygrod R; Greenberg S; +
CORPORATE SOURCE: Department of Physiology, Columbia University, College of Physicians and Surgeons, New York, New York 10032.
CONTRACT NUMBER: HL02641 (NHLBI)
HL42507 (NHLBI)
HL42833 (NHLBI)
+
SOURCE: JOURNAL OF BIOLOGICAL CHEMISTRY, (1994 Oct 7) 269 (40) 25106-19.
Journal code: HIV; 2985121R. ISSN: 0021-9258.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
OTHER SOURCE: GENBANK-U10117; GENBANK-U10118
ENTRY MONTH: 199411
ED Entered STN: 19941222
Last Updated on STN: 19941222
Entered Medline: 19941104
AB . . . (EMAP II, approximately 20 kDa form) activated endothelial cells with resulting elevation of cytosolic free calcium concentration, release of von **Willebrand** factor, induction of tissue factor, and expression of the adhesion molecules E-selectin and P-selectin. Neutrophils exposed to EMAP II demonstrated. . . cytosolic free calcium concentration, peroxidase generation, and chemotaxis. EMAP II also activated mononuclear phagocytes elevating cytosolic free calcium concentration, inducing tumor necrosis factor-alpha (TNF) and tissue factor, and stimulating chemotaxis. Systemic infusion of EMAP II into C3H/HeJ or Balb/c mice was associated with systemic toxicity, pulmonary congestion, and the appearance of TNF, interleukin-1 and -6 in the plasma. A single intra-**tumor** injection of EMAP II into Meth A sarcomas induced acute thrombohemorrhage and partial **tumor**

regression. Local injection of EMAP II into a tumor resistant to the effects of TNF, murine mammary carcinoma, rendered it sensitive to subsequently administered TNF, which resulted in acute thrombohemorrhage and partial regression. These data suggest that recombinant EMAP II, a tumor-derived cytokine, has properties of a proinflammatory mediator with the capacity to prime the tumor vasculature for a locally destructive process.

L9 ANSWER 158 OF 215 MEDLINE DUPLICATE 125
ACCESSION NUMBER: 94259791 MEDLINE
DOCUMENT NUMBER: 94259791 PubMed ID: 7911127
TITLE: Cellular markers that distinguish the phases of hemangioma during infancy and childhood.
AUTHOR: Takahashi K; Mulliken J B; Kozakewich H P; Rogers R A; Folkman J; Ezekowitz R A
CORPORATE SOURCE: Division of Hematology/Oncology, Children's Hospital, Boston, Massachusetts 02115.
CONTRACT NUMBER: MO1RR02172 (NCRR)
SOURCE: JOURNAL OF CLINICAL INVESTIGATION, (1994 Jun) 93 (6) 2357-64.
Journal code: HS7; 7802877. ISSN: 0021-9738.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 199407
ED Entered STN: 19940714
Last Updated on STN: 20000303
Entered Medline: 19940707
AB Hemangiomas, localized tumors of blood vessels, appear in approximately 10-12% of Caucasian infants. These lesions are characterized by a rapid proliferation of capillaries for the first year (proliferating phase), followed by slow, inevitable, regression of the tumor over the ensuing 1-5 yr (involuting phase), and continual improvement until 6-12 yr of age (involuted phase). To delineate the. . . nine independent markers. The proliferating phase was defined by high expression of proliferating cell nuclear antigen, type IV collagenase, and vascular endothelial growth factor. Elevated expression of the tissue inhibitor of metalloproteinase, TIMP 1, an inhibitor of new blood vessel formation,. . . was present in the proliferating and involuting phases. There was coexpression of bFGF and endothelial phenotypic markers CD31 and von Willebrand factor in the proliferating phase. These results provide an objective basis for staging hemangiomas and may be used to evaluate pharmacological agents, such as corticosteroids and interferon alfa-2a, which accelerate regression of hemangiomas. By contrast, vascular malformations do not express proliferating cell nuclear antigen, vascular endothelial growth factor, bFGF, type IV collagenase, and urokinase. These data demonstrate immunohistochemical differences between proliferating hemangiomas and vascular malformations which reflect the biological distinctions between these vascular lesions.

L9 ANSWER 159 OF 215 MEDLINE
ACCESSION NUMBER: 95147342 MEDLINE
DOCUMENT NUMBER: 95147342 PubMed ID: 7844884
TITLE: Effect of shear stress on hemostatic regulation in endothelium.
AUTHOR: Kawai Y; Matsumoto Y; Ikeda Y; Yamamoto H; Satoh K; Watanabe K
CORPORATE SOURCE: Department of Laboratory Medicine, Keio University, School of Medicine, Tokyo.
SOURCE: RINSHO BYORI. JAPANESE JOURNAL OF CLINICAL PATHOLOGY, (1994 Nov) 42 (11) 1128-36.
Journal code: KIV; 2984781R. ISSN: 0047-1860.
PUB. COUNTRY: Japan
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: Japanese
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199503
ED Entered STN: 19950316
Last Updated on STN: 19980206
Entered Medline: 19950309
AB The vascular endothelium plays a pivotal role in regulating the hemostatic system. Various cytokines, such as interleukin-1 (IL-1) and tumor necrosis factor (TNF) are known to perturb endothelial cells to reduce antithrombogenicity. On the other hand, blood flow has been. . . under some levels of shear stress in the laminar flow system. We examined the role of hemodynamic forces on the vascular system under cytokine stimulation using a cone-plate type viscometer. Treatment of endothelial cells with either IL-1 beta or TNF-alpha under static conditions increased PAI-1, vWF and prostacyclin release, while t-PA secretion was unchanged. When cells were exposed to steady shear stress of 0, 6, 12,. . . prostacyclin elevated with the increase of shear stress intensity, while a gradual decrease of total PAI-1 secretion was observed and vWF secretion was unchanged. On the contrary, active PAI-1 secretion was significantly decreased under the shear stress of over 18 dyne/cm2.. . . induced by cytokines was markedly abolished under the same shear forces. No additive effect was observed in the secretion of vWF. Thus, shear stress attenuates the alteration of the balance in the fibrinolytic and coagulation system induced by cytokines. These findings. . .

L9 ANSWER 160 OF 215 MEDLINE DUPLICATE 126
ACCESSION NUMBER: 95077144 MEDLINE
DOCUMENT NUMBER: 95077144 PubMed ID: 7985828
TITLE: Plasma levels of tumor necrosis factor and endothelial response in patients with chronic arterial obstructive disease or Raynaud's phenomenon.
AUTHOR: Cimminiello C; Arpaia G; Toschi V; Rossi F; Aloisio M; Motta A; Bonfardeci G
CORPORATE SOURCE: Fourth Internal Medicine Department, S. Carlo Borromeo General Hospital, Milan, Italy.
SOURCE: ANGIOLOGY, (1994 Dec) 45 (12) 1015-22.
Journal code: 4UA; 0203706. ISSN: 0003-3197.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199412
ED Entered STN: 19950116
Last Updated on STN: 19980206
Entered Medline: 19941230
AB Tumor necrosis factor alpha (TNF-alpha) is a cytokine that

affects endothelial cells' function by changing their antithrombotic potential to a net procoagulant effect. Only a few data have so far been reported for the pathophysiologic role of TNF in vascular diseases in the involvement of microvessels and/or macrovessels and a prothrombotic state. In the present study the authors evaluated plasma. . . age with the three groups of patients. TNF levels were assayed by enzyme-linked immunosorbent assay. The antigen levels of von Willebrand factor (vWF), tissue plasminogen activator (t-PA), and its inhibitor (PAI) were also determined as markers of release from the endothelium, while the. . . significantly higher in both groups of CAOD patients than in controls or RP patients, and the same was true for vWF. t-PA was significantly higher only in the CAOD subjects with more severe disease. No differences among groups were seen in. . .

L9 ANSWER 161 OF 215 MEDLINE DUPLICATE 127
ACCESSION NUMBER: 95057039 MEDLINE
DOCUMENT NUMBER: 95057039 PubMed ID: 7967526
TITLE: Isolation and characterization of microvascular endothelial cells from the adult human dermis and from skin biopsies of patients with systemic sclerosis.
AUTHOR: Kraling B M; Jimenez S A; Sorger T; Maul G G
CORPORATE SOURCE: Children's Hospital Department of Surgery, Boston, Massachusetts.
CONTRACT NUMBER: AR-19616 (NIAMS)
CA-10815 (NCI)
SOURCE: LABORATORY INVESTIGATION, (1994 Nov) 71 (5) 745-54.
Journal code: KZ4; 0376617. ISSN: 0023-6837.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199412
ED Entered STN: 19950110
Last Updated on STN: 19950110
Entered Medline: 19941227
AB . . . applied for endothelial cell isolation. RESULTS: The cultured ADMEC and SSc-ADMEC showed the endothelial cell-specific antigenic determinants of intracellular von Willebrand factor and platelet endothelial cell adhesion molecule-1 along their cell-cell borders. These cells displayed specific uptake of acetylated low-density lipoprotein. Normal ADMEC were additionally characterized for angiotensin I-converting enzyme activity. Tumor necrosis factor-alpha activated normal ADMEC and SSc-ADMEC expressed the inflammatory adhesion molecules E-selectin, intercellular adhesion molecule-1, and vascular cell adhesion molecule-1, similarly to tumor necrosis factor-alpha-activated large-vessel endothelium represented by human . umbilical cord vein endothelial cells. Normal ADMEC and human umbilical cord vein endothelial. . .

L9 ANSWER 162 OF 215 MEDLINE DUPLICATE 128
ACCESSION NUMBER: 95029936 MEDLINE
DOCUMENT NUMBER: 95029936 PubMed ID: 7943363
TITLE: Presence and distribution of endothelin-1 gene expression in human kidney.
AUTHOR: Pupilli C; Brunori M; Misciglia N; Selli C; Ianni L; Yanagisawa M; Mannelli M; Serio M
CORPORATE SOURCE: Department of Clinical Physiopathology, University of Florence, Italy.
SOURCE: AMERICAN JOURNAL OF PHYSIOLOGY, (1994 Oct) 267 (4 Pt 2) F679-87.
Journal code: 3U8; 0370511. ISSN: 0002-9513.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199411
ED Entered STN: 19941222
Last Updated on STN: 19941222
Entered Medline: 19941118
AB . . . distribution of preproendothelin-1 (prepro-ET-1) mRNA in human kidney, eight human kidneys obtained at surgery from patients affected by localized renal tumors were studied. Northern blot analysis using a human prepro-ET-1 cDNA probe labeled with 32P showed the presence of a single. . . in vasa recta bundles and capillaries and in collecting ducts. By combining in situ hybridization with immunohistochemical detection of von Willebrand factor, we demonstrated that 93 +/- 2.5% of nontubular medullary cells containing prepro-ET-1 mRNA were endothelial cells. In the cortex,. . . the endothelial cells of afferent arterioles. The results of the present study demonstrate that ET-1 gene expression is present in vascular and tubular structures of the human kidney. It is possible that ET-1 synthesized locally in the human kidney represents a. . .

L9 ANSWER 163 OF 215 MEDLINE DUPLICATE 129
ACCESSION NUMBER: 95057011 MEDLINE
DOCUMENT NUMBER: 95057011 PubMed ID: 7526034
TITLE: Characterization of a spontaneously transformed human endothelial cell line.
AUTHOR: Cockerill G W; Meyer G; Noack L; Vadas M A; Gamble J R
CORPORATE SOURCE: Hanson Center for Cancer Research, IMVS, Adelaide.
SOURCE: LABORATORY INVESTIGATION, (1994 Oct) 71 (4) 497-509.
Journal code: KZ4; 0376617. ISSN: 0023-6837.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199411
ED Entered STN: 19950110
Last Updated on STN: 19960129
Entered Medline: 19941129
AB . . . cloned, and ability to be transfected was investigated. The cell line was analyzed for expression of endothelial cell markers, von Willebrand Factor, P selectin, and scavenger receptor. We also examined the tumor necrosis factor (TNF)-mediated upregulation of E-selectin, vascular cell adhesion molecule-1 and intercellular adhesion molecule-1. We evaluated the levels of expression and types of TNF-alpha receptor expressed by. . . The ability to support neutrophil adhesion and transmigration, and generate capillary-like tubes in vitro was assessed. Finally, the karyotype and tumourigenicity of this line was established. RESULTS: This cell line (C11STH) has a doubling time comparable to that of normal HUVECs. . . is capable of generating colonies at clonal density, and is

transfectable with efficiencies comparable to normal HUVECs. C11STH expresses von Willebrand factor, P-selectin, and scavenger receptor to an extent similar to passaged HUVECs and can be induced to express E-selectin, VCAM,. . .

L9 ANSWER 164 OF 215 MEDLINE DUPLICATE 130
ACCESSION NUMBER: 94211748 MEDLINE
DOCUMENT NUMBER: 94211748 PubMed ID: 7512718
TITLE: Endothelial cell markers CD31, CD34, and BNH9 antibody to H- and Y-antigens--evaluation of their specificity and sensitivity in the diagnosis of vascular tumors and comparison with von Willebrand factor.
AUTHOR: Miettinen M; Lindenmayer A E; Chaubal A
CORPORATE SOURCE: Department of Pathology and Cell Biology, Jefferson Medical College, Thomas Jefferson University, Philadelphia, Pennsylvania.
SOURCE: MODERN PATHOLOGY, (1994 Jan) 7 (1) 82-90.
Journal code: PTH; 8806605. ISSN: 0893-3952.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199405
ED Entered STN: 19940526
Last Updated on STN: 19960129
Entered Medline: 19940517

TI . . . cell markers CD31, CD34, and BNH9 antibody to H- and Y-antigens--evaluation of their specificity and sensitivity in the diagnosis of vascular tumors and comparison with von Willebrand factor.

AB Sixty vascular tumors including 23 angiosarcomas, 300 nonvascular tumors, and selected normal tissues were immunohistochemically evaluated with antibodies to CD31, CD34, and von Willebrand factor (vWF), and monoclonal antibody BNH9, to test the sensitivity and specificity of these markers in the identification of endothelial cells and vascular tumors . Formaldehyde-fixed paraffin-embedded tissues and avidin biotin complex immunostaining were used. All markers labeled normal vascular and lymphatic endothelial cells approximately equally with the exception of CD34 which showed inconsistent expression within the lymphatics. In addition,. . . with fibroblasts and aortic smooth muscle cells, and BNH9 with many epithelial cells including squamous and gastrointestinal epithelia. Antibody to vWF often showed significant stromal background staining which made the staining occasionally uninterpretable. Benign vascular tumors showed rather uniform staining with all antibodies. However, angiosarcomas were heterogeneous; CD31 was positive in 21/27, CD34 in 25/27 cases, BNH9 in 22/25, and vWF in 18/27 cases. Epithelioid hemangioendotheliomas showed consistent labeling for vWF, but were inconsistently labeled with antibodies to the other markers. Kaposi's sarcoma was positive for both CD31 and CD34. In addition, antibody to CD34 labeled the tumor cells in hemangiopericytoma, cerebellar hemangioblastoma, meningioma, most epithelioid sarcomas, dermatofibrosarcomas, and in a few other sarcomas. CD31, in turn, was. . .

L9 ANSWER 165 OF 215 MEDLINE DUPLICATE 131
ACCESSION NUMBER: 94268123 MEDLINE
DOCUMENT NUMBER: 94268123 PubMed ID: 8207971
TITLE: Characterization of ovine lymphatic endothelial cells and their interactions with lymphocytes.
AUTHOR: Borron P; Hay J B
CORPORATE SOURCE: Department of Immunology, University of Toronto, Ontario, Canada.
SOURCE: LYMPHOLOGY, (1994 Mar) 27 (1) 6-13.
Journal code: LA3; 0155112. ISSN: 0024-7766.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199407
ED Entered STN: 19940721
Last Updated on STN: 19940721
Entered Medline: 19940712

AB The interaction of blood-borne lymphocytes with blood vascular endothelial cells is a fundamental component of lymphocyte circulation. The role of lymphatic endothelial cells is less certain. These studies. . . lymphocyte binding capacity of efferent lymphatic endothelial cells from ovine mesenteric lymphatic vessels. Lymphatic endothelial cells had anti-thrombin 3, von Willebrand Factor and MHC I on their surface. The cells also actively metabolized acetylated low density lipoprotein. The morphological appearance was indistinguishable from blood vascular endothelium but quite different from cultured smooth muscle cells. Lymphocyte binding to lymphatic endothelial cells was not significantly different from. . . degree of binding in all cases could be enhanced by incubating endothelial cells in medium containing rh TNF-alpha (recombinant human tumor necrosis factor alpha).

L9 ANSWER 166 OF 215 MEDLINE DUPLICATE 132
ACCESSION NUMBER: 94061865 MEDLINE
DOCUMENT NUMBER: 94061865 PubMed ID: 7694795
TITLE: Up-regulation of vascular endothelial growth factor and its cognate receptors in a rat glioma model of tumor angiogenesis.
AUTHOR: Plate K H; Breier G; Millauer B; Ullrich A; Risau W
CORPORATE SOURCE: Max-Planck-Institut fur Psychiatrie, Abteilung Neurochemie, Martinsried, Germany.
SOURCE: CANCER RESEARCH, (1993 Dec 1) 53 (23) 5822-7.
Journal code: CNF; 2984705R. ISSN: 0008-5472.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199401
ED Entered STN: 19940201
Last Updated on STN: 20000303
Entered Medline: 19940103

AB We have recently shown that vascular endothelial growth factor (VEGF) is produced by human malignant glioma cells and acts on tumor endothelial cells, which express VEGF receptors, suggesting that VEGF is a regulator of tumor angiogenesis. To investigate the feasibility of antiangiogenic brain tumor therapy, we developed an intracerebral (i.c.) rat glioma model. We used two

transplantable rat glioma cells lines, C6 and GS-9L,. . . syngeneic rats. C6 gliomas exhibit morphological characteristics of human glioblastoma multiforme such as necroses with palisading cells. Immunocytochemistry with von **Willebrand** factor showed that C6 gliomas are highly **vascularized** and therefore show another prominent feature of human glioblastoma. GS-9L gliosarcomas were less **vascularized**. In situ hybridization showed that VEGF is expressed in vivo in rat glioma cells which reside along necrotic areas and. . . the expression pattern of VEGF observed in human glioblastoma. flt-1 and flk-1 are specifically expressed in endothelial cells in the **tumor** and at the border between **tumor** and normal brain but are absent from endothelial cells in the normal brain proper. The action of VEGF may therefore be restricted to **tumor** endothelium. Upregulation of VEGF, but not acid fibroblast growth factor, basic fibroblast growth factor, and platelet-derived growth factor B messenger. . . was observed in hypoxic C6 and GS-9L cells in vitro. These observations are consistent with a role for VEGF in **tumor**- and hypoxia-induced angiogenesis. Since the expression pattern of VEGF and its receptors in rat glioma appears to be indistinguishable from. . .

L9 ANSWER 167 OF 215 MEDLINE DUPLICATE 133
ACCESSION NUMBER: 94046850 MEDLINE
DOCUMENT NUMBER: 94046850 PubMed ID: 8230013
TITLE: Mechanisms of endothelial cell damage in systemic sclerosis and Raynaud's phenomenon.
AUTHOR: Blann A D; Illingworth K; Jayson M I
CORPORATE SOURCE: University Department of Surgery, University Hospital of South Manchester, UK.
SOURCE: JOURNAL OF RHEUMATOLOGY, (1993 Aug) 20 (8) 1325-30. Journal code: JWX; 7501984. ISSN: 0315-162X.
PUB. COUNTRY: Canada
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199312
ED Entered STN: 19940117
Last Updated on STN: 19940117
Entered Medline: 19931221

AB OBJECTIVE. To investigate **tumor** necrosis factor (TNF), circulating immune complexes (CIC) and oxidized lipoproteins [measured as thiobarbituric acid reactive substances (TBARS)] as mediators of. . . endothelial cells (EC) in systemic sclerosis (SSc) and Raynaud's phenomenon (RP). METHODS. In addition to CIC, TBARS and TNF, von **Willebrand** factor (**vWF**), angiotensin converting enzyme (ACE) and EC cytotoxicity were measured as markers of EC damage. C-reactive protein (CRP) and rheumatoid factor (RF) were measured as indicators of inflammation. RESULTS. There were increases in TBARS and CIC, **vWF** and EC cytotoxicity, and CRP, with reduced levels of ACE. There were no correlations between any possible mediator of damage (TNF, TBARS, CIC) and indicators of such injury to the endothelium ( **vWF**, ACE, EC cytotoxicity) except an inverse correlation between **vWF** and ACE. When patients with SSc were classified into those with limited disease (ISSc) or diffuse disease (dSSc), only wWF was different, being higher in patients with dSSc. In RP, **vWF**, RF and TBARS were again raised and ACE was lower. The only correlation was inversely between **vWF** and ACE. CONCLUSION. Our results are suggestive of injury to the endothelium in both SSc and RP, with greater damage. . . were multiple abnormalities in biochemical and immunological indices, there were no consistent correlations to explain the clear damage to the **vasculature**. We conclude that additional mechanisms other than TNF, CIC and lipid peroxides may be responsible for the insult to the **vascular** tree so evident in these patients.

L9 ANSWER 168 OF 215 MEDLINE DUPLICATE 134
ACCESSION NUMBER: 94144361 MEDLINE
DOCUMENT NUMBER: 94144361 PubMed ID: 8310831
TITLE: Splenic hemangiosarcoma with sinus endothelial differentiation.
AUTHOR: Takato H; Iwamoto H; Ikezu M; Kato N; Ikarashi T; Kaneko H
CORPORATE SOURCE: Department of Pathology, Nagaoka Red Cross Hospital, Japan.
SOURCE: ACTA PATHOLOGICA JAPONICA, (1993 Nov) 43 (11) 702-8. Journal code: 1NE; 0372637. ISSN: 0001-6632.
PUB. COUNTRY: Australia
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199403
ED Entered STN: 19940330
Last Updated on STN: 19940330
Entered Medline: 19940317

AB A case of primary splenic hemangiosarcoma where the **tumors** entirely replaced the spleen is reported. Histologically, the splenic **tumors** consisted of two major components: (i) solid and nodular areas, in which spindle cells (SC) were arranged in interlacing fascicles; and (ii) vasoformative areas, in which **vascular** lining cells (VC) closely resembled normal splenic sinus endothelial cells (SSEC) in shape. Both SC and VC were immunoreactive with the markers of **vascular** endothelial cells (EC) including SSEC, JC70, von **Willebrand** factor, OKM5, vimentin MAb and Ulex europaeus-1 lectin. The **tumor** cells were positive for OKM5 MAb as well as normal SSEC and sheathed arterial EC, but other **vascular** EC in normal spleen were negative. Enzyme-histochemically, the **tumor** cells and normal SSEC revealed naphthol AS-D acetate esterase activity but no reaction for ALPase, whereas normal **vascular** EC other than SSEC in the spleen were positive for the latter but negative for the former. These studies revealed that the **tumor** cells expressed the same phenotype as normal SSEC. To the present author's knowledge this is the first report demonstrating sinus. . .

L9 ANSWER 169 OF 215 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 93342718 EMBASE
DOCUMENT NUMBER: 1993342718
TITLE: [Epithelioid hemangioendothelioma of the liver - A report of two cases].
HEMANGIO-ENDOTHELIOME EPITHELIOIDE DU FOIE: DEUX RAPPORTS DE CAS.
AUTHOR: Morris J.E.; Malatjalian D.A.; Bodurthra A.; Smith M.; Koller O.; Bhan J.; Magtibay L.
CORPORATE SOURCE: Department of Pathology, Victoria General Hospital,Halifax, NS B3H 2Y9, Canada
SOURCE: Canadian Journal of Gastroenterology, (1993) 7/7 (530-534). ISSN: 0835-7900 CODEN: CJGAEJ
COUNTRY: Canada

DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 016 Cancer
048 Gastroenterology
LANGUAGE: English
SUMMARY LANGUAGE: English; French

AB Epithelioid hemangioendothelioma (EHE) is an uncommon tumour of endothelial origin having borderline malignant potential which frequently is initially misdiagnosed when occurring in the liver, often as cholangiocarcinoma,. . . was made from a wedge biopsy of liver taken during an exploratory laparotomy. In both cases, immunohistochemical reactivity of the tumour cells for von Willebrand factor (FVIIIR:Ag) and Ulex europeaus I lectin was key to the final diagnosis. The first patient, to this time, remains. . . year since the initial diagnosis). Hepatic EHE can present a diagnostic dilemma. The use of immunohistochemical techniques to demonstrate the vascular origin of this tumour is essential for its diagnosis. Better awareness of this lesion and the features differentiating it from other histologically similar lesions. . .

L9 ANSWER 170 OF 215 MEDLINE DUPLICATE 135
ACCESSION NUMBER: 93262946 MEDLINE
DOCUMENT NUMBER: 93262946 PubMed ID: 7684179
TITLE: Cellular components of microvascular proliferation in human glial and metastatic brain neoplasms. A light microscopic and immunohistochemical study of formalin-fixed, routinely processed material.
AUTHOR: Wesseling P; Vandersteenhoven J J; Downey B T; Ruiter D J; Burger P C
CORPORATE SOURCE: Department of Pathology, University Hospital Nijmegen, The Netherlands.
SOURCE: ACTA NEUROPATHOLOGICA, (1993) 85 (5) 508-14.
Journal code: 1CE; 0412041. ISSN: 0001-6322.
PUB. COUNTRY: GERMANY: Germany, Federal Republic of
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199306
ED Entered STN: 19930625
Last Updated on STN: 19960129
Entered Medline: 19930615

AB . . . origin of cells contributing to microvascular proliferation (MVP) in glial neoplasms is unsettled, a light microscopic and immunohistochemical study for vascular smooth muscle cells and endothelial cells was performed in formalin-fixed, routinely processed brain tumor biopsy material. MVP in glial neoplasms was compared with that in intracerebral metastatic carcinomas and in intracranial granulation tissue. On. . . cells in the microvascular wall, MVP was subjectively divided into mild, moderate, and glomeruloid (marked) proliferation. The relative contribution of vascular smooth muscle cells and endothelial cells to different degrees of MVP was estimated immunohistochemically using antibodies against alpha-smooth muscle actin and von Willebrand factor, respectively. Glomeruloid MVP occurred in 50% of the malignant glial neoplasms. Moderate MVP was found in most malignant gliomas. . . glial tissue in 4 out of 15 intracerebral metastatic carcinomas, while only mild to moderate MVP was found within these tumors. In granulation tissue MVP was mild. In glomeruloid and moderate MVP vascular smooth muscle cells were more hypertrophic and more numerous than endothelial cells. The contribution of hypertrophic vascular smooth muscle cells to mild MVP was variable. MVP in glial neoplasms was generally not accompanied by a matrix of. . .

L9 ANSWER 171 OF 215 MEDLINE DUPLICATE 136
ACCESSION NUMBER: 93374574 MEDLINE
DOCUMENT NUMBER: 93374574 PubMed ID: 8396077
TITLE: [Multiple disseminated glomus tumors (glomangioma). Immunohistochemical analysis and differentiation from viscerocutaneous hemangiomatosis].
Multiple disseminierte Glomustumoren (Glomangiome). Immunhistochemische Analyse und Abgrenzung zur viszerokutanen Hamangiomatose.
AUTHOR: Schirren C G; Eckert F; Kind P
CORPORATE SOURCE: Dermatologische Klinik und Poliklinik, Ludwig-Maximilians-Universitat Munchen.
SOURCE: HAUTARZT, (1993 Jul) 44 (7) 457-61.
Journal code: G13; 0372755. ISSN: 0017-8470.
PUB. COUNTRY: GERMANY: Germany, Federal Republic of
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: German
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199310
ED Entered STN: 19931022
Last Updated on STN: 19931022
Entered Medline: 19931004

AB A 25-year-old patient presented with multiple disseminated asymptomatic bluish nodules, which had been present since childhood. Histological examination revealed vascular cavities surrounded by round to oval eosinophilic cells. Positive immunohistochemical staining with alpha-smooth-muscle antigen (alpha-SMA) and vimentin confirmed the diagnosis of multiple disseminated glomus tumours of the vascular type. Tumour cells were surrounded by a network of type IV collagen. In contrast antibodies against the intermediate filament protein desmin and the endothelial markers BMA 120 and anti-von Willebrand factor revealed no staining of the glomus cells. This was the first immunohistochemical investigation of a glomus tumour of vascular type. Immunohistochemical staining of these glomus cells revealed no difference from other histological types of glomus tumours.

L9 ANSWER 172 OF 215 MEDLINE DUPLICATE 137
ACCESSION NUMBER: 93388022 MEDLINE
DOCUMENT NUMBER: 93388022 PubMed ID: 8375928
TITLE: Defective vasculature in fibronectin-receptor-deficient CHO cell tumors in nude mice.
AUTHOR: Schreiner C L; Fisher M; Bauer J; Juliano R L
CORPORATE SOURCE: Department of Pharmacology, School of Medicine, University of North Carolina, Chapel Hill 27599.
CONTRACT NUMBER: GM26165 (NIGMS)
SOURCE: INTERNATIONAL JOURNAL OF CANCER, (1993 Sep 30) 55 (3) 436-41.
Journal code: GQU; 0042124. ISSN: 0020-7136.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199310
ED Entered STN: 19931105
Last Updated on STN: 19931105
Entered Medline: 19931021

AB . . . level of expression of the alpha 5/beta 1 integrin fibronectin receptor (FnR) strongly affects the growth rate of CHO cell **tumors** in nude mice. Here we report that alpha 5/beta 1 expression also influences the organization of the **tumor vasculature**. **Tumors** formed from CHO clones defective in FnR expression have a leaky **vasculature** that gives them a hemorrhagic appearance. **Tumors** from wild-type CHO cells, or from FnR-deficient CHO clones transfected with constructs coding for the alpha 5 integrin subunit, have an intact, non-leaky **vasculature**. In **tumors** from FnR-deficient cells, the endothelial lining of blood vessels is sparse, and red cells and plasma proteins can be detected in the **tumor** parenchyma. In **tumors** from cells expressing the alpha 5/beta 1 FnR, **tumor** vessels are circumscribed by a lining of von-**Willebrand**-factor-positive endothelial cells, and blood cells and proteins are confined to the vessel lumina. Thus, the level of expression of the alpha 5/beta 1 FnR in the **tumor** parenchymal cells can influence the development of **tumor vasculature**. Since alpha 5/beta 1 is vital to the organization of the extracellular matrix, one possibility is that altered matrix assembly contributes to the defective **vascularization** seen in alpha 5/beta 1-deficient **tumors**.

L9 ANSWER 173 OF 215 MEDLINE DUPLICATE 138
ACCESSION NUMBER: 93285838 MEDLINE
DOCUMENT NUMBER: 93285838 PubMed ID: 8509210
TITLE: A monoclonal antibody detects heterogeneity in vascular endothelium of tumours and normal tissues.
AUTHOR: Wang J M; Kumar S; Pye D; van Agthoven A J; Krupinski J; Hunter R D
CORPORATE SOURCE: Christie Hospital, Manchester, UK.
SOURCE: INTERNATIONAL JOURNAL OF CANCER, (1993 May 28) 54 (3) 363-70.
Journal code: GQU; 0042124. ISSN: 0020-7136.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199307
ED Entered STN: 19930723
Last Updated on STN: 19930723
Entered Medline: 19930709

AB . . . conditions. MAb E-9 showed marked heterogeneity in its distribution in various tissues. The antigen recognized by it was present in **vascular** endothelial cells of all **tumours**, foetal organs and in regenerating and inflamed tissues. It stained a few normal tissues. However, with the exception of tonsils,. . . and limited to a few blood vessels, as revealed by double staining using pan-endothelial antibody (CD31) and antibody to von **Willebrand** factor, another marker of **vascular** endothelium. Surprisingly, blood vessels within the placental villi were completely negative. The function of the antigen recognized by MAb E-9. . .

L9 ANSWER 174 OF 215 MEDLINE DUPLICATE 139
ACCESSION NUMBER: 93166551 MEDLINE
DOCUMENT NUMBER: 93166551 PubMed ID: 8094579
TITLE: Production of cytokines (TNF-alpha, IL-1-beta) and endothelial cell activation in human liver allograft rejection.
AUTHOR: Hoffmann M W; Wonigeit K; Steinhoff G; Herzbeck H; Flad H D; Pichlmayr R
CORPORATE SOURCE: Klinik fur Abdominal-und Transplantationschirurgie, Medizinische Hochschule Hannover, Germany.
SOURCE: TRANSPLANTATION, (1993 Feb) 55 (2) 329-35.
Journal code: WEJ; 0132144. ISSN: 0041-1337.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199303
ED Entered STN: 19930402
Last Updated on STN: 19950206
Entered Medline: 19930317

AB Intragraft production of tumor necrosis factor-alpha (TNF-alpha) and interleukin-1-beta (IL-1-beta) was determined in rejecting human liver grafts during acute rejection and in chronic graft. . . monocytes, and concomitant TNF-alpha plasma levels were elevated compared with uncomplicated controls. In marked contrast IL-1-beta production by macrophages and **vascular** and sinus endothelial cells was restricted to the most severe, irreversible rejection episodes. The localization of cytokine-positive cells coincided with areas of maximum induction of ICAM-1 and von **Willebrand** Factor. In chronic graft dysfunction increased numbers of mature macrophages were found. A large proportion of these were positive for. . .

L9 ANSWER 175 OF 215 MEDLINE DUPLICATE 140
ACCESSION NUMBER: 94210268 MEDLINE
DOCUMENT NUMBER: 94210268 PubMed ID: 7512644
TITLE: Induction of nitric oxide synthase in the neo-vasculature of experimental tumours in mice.
COMMENT: Comment in: J Pathol. 1994 Jul;173(3):293-4
AUTHOR: Buttery L D; Springall D R; Andrade S P; Riveros-Moreno V; Hart I; Piper P J; Polak J M
CORPORATE SOURCE: Department of Histochemistry, Royal Postgraduate Medical School, Hammersmith Hospital, London.
SOURCE: JOURNAL OF PATHOLOGY, (1993 Dec) 171 (4) 311-9.
Journal code: JLB; 0204634. ISSN: 0022-3417.
PUB. COUNTRY: ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199405
ED Entered STN: 19940526
Last Updated on STN: 19960129
Entered Medline: 19940518

AB Maintenance of blood flow is an important factor in sustaining **tumour** growth. Functional studies have previously demonstrated a reduction in **tumour** blood flow with selective inhibitors of

nitric oxide (NO) synthesis, L-NAME (NG-nitro-L-arginine-methylester) and L-NMMA (NG-monomethyl-L-arginine), when administered locally to tumours derived from murine colon 26 adenocarcinoma and B16 melanoma cells. The type of NO synthase which might be responsible for. . . antisera to constitutive and inducible isoforms of NO synthase. Immunoreactivity with antisera to inducible NO synthase was detected in the vasculature of neoplastic implants, with and without the sponge, at 12 and 14 days. The enzyme was not evident in 7-day-old tumours, in non-neoplastic implants, in areas of tissue outside the tumour, or in adenocarcinoma or melanoma cells. Enzyme activity was measurable in homogenates of neoplastic implants removed at day 7 and. . . with antisera to inducible NO synthase was seen principally in the endothelium of newly-formed capillaries, identified by immunostaining for von Willebrand factor in serial sections. Immunoreactivity with antiserum to constitutive NO synthase was not evident in either neoplastic or non-neoplastic implants.(ABSTRACT. . .

L9 ANSWER 176 OF 215 MEDLINE DUPLICATE 141
ACCESSION NUMBER: 94146367 MEDLINE
DOCUMENT NUMBER: 94146367 PubMed ID: 8312565
TITLE: Endothelial cell responses to fibrin mediated by FPB cleavage and the amino terminus of the beta chain.
AUTHOR: Francis C W; Bunce L A; Sporn L A
CORPORATE SOURCE: Department of Medicine, University of Rochester School of Medicine & Dentistry, New York.
SOURCE: BLOOD CELLS, (1993) 19 (2) 291-306; discussion 306-7. Ref: 54
Journal code: A8H; 7513567. ISSN: 0340-4684.
PUB. COUNTRY: GERMANY: Germany, Federal Republic of
Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199403
ED Entered STN: 19940330
Last Updated on STN: 19980206
Entered Medline: 19940324
AB Endothelial cells (EC) interact with fibrin at sites of vascular injury, thrombosis, inflammation and tumor growth, whereas they are quiescent when exposed to circulating fibrinogen. To determine the structural basis for specific interaction with fibrin. . . which cleaves only FPA, and with contortrix procoagulant to cleave only FPB. Fibrin with FPB cleavage stimulated release of von Willebrand factor from EC Weibel-Palade bodies and also supported cell spreading. Involvement of the amino terminus of the fibrin beta chain in the response was shown by stimulation of von Willebrand factor release by the peptide beta 15-42. Also, fibrin prepared from a fibrinogen derivative lacking residues 15-42 of the beta. . .

L9 ANSWER 177 OF 215 MEDLINE
ACCESSION NUMBER: 94071792 MEDLINE
DOCUMENT NUMBER: 94071792 PubMed ID: 7504452
TITLE: P-selectin and wound healing.
AUTHOR: Erban J K
CORPORATE SOURCE: Division of Hematology/Oncology, New England Medical Center, Boston, Ma.
CONTRACT NUMBER: HL02542 (NHLBI)
SOURCE: BEHRING INSTITUTE MITTEILUNGEN, (1993 Aug) (92) 248-57. Ref: 83
Journal code: 9KI; 0367532. ISSN: 0301-0457.
PUB. COUNTRY: GERMANY: Germany, Federal Republic of
Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199401
ED Entered STN: 19940201
Last Updated on STN: 19960129
Entered Medline: 19940106
AB . . . of physiologic responses. The endothelium responds to fibrin contact in numerous ways including the rapid release of stored of von Willebrand factor and the expression of P-selectin upon the cell surface. Deposition of fibrin at the site of vascular injury serves other vital roles in the acute response to injury. Fibrin deposition stabilizes platelets as part of the development. . . muscle cells and endothelial cells may adhere and migrate in order to return the vessel to its original state. In tumorigenesis, fibrinogen and fibrin may deposit in the perivascular space within the tumor and contribute by incompletely understood mechanisms to tumor growth and metastasis. The understanding of fibrin induced endothelial cell responses and how P-selectin and other endothelial cell adhesion molecules function in wound healing is important for understanding the vascular response to injury.

L9 ANSWER 178 OF 215 MEDLINE DUPLICATE 142
ACCESSION NUMBER: 93184390 MEDLINE
DOCUMENT NUMBER: 93184390 PubMed ID: 7680247
TITLE: Epidermal growth factor stimulates vascular endothelial growth factor production by human malignant glioma cells: a model of glioblastoma multiforme pathophysiology.
AUTHOR: Goldman C K; Kim J; Wong W L; King V; Brock T; Gillespie G Y
CORPORATE SOURCE: Brain Tumor Research Laboratories, Division of Neurosurgery, University of Alabama, Birmingham 35294-0006.
CONTRACT NUMBER: HL-41180 (NHLBI)
NS31096 (NINDS)
T32NSO7335 (NINDS)
SOURCE: MOLECULAR BIOLOGY OF THE CELL, (1993 Jan) 4 (1) 121-33.
Journal code: BAU; 9201390. ISSN: 1059-1524.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199304
ED Entered STN: 19930416
Last Updated on STN: 20000303
Entered Medline: 19930408
AB . . . and rapid cellular proliferation are key histopathologic features of glioblastoma multiforme (GBM), the most common and malignant of human brain tumors. By immunoperoxidase and immunofluorescence, we definitively have demonstrated the presence of vascular

endothelial growth factor (VEGF) and epidermal growth factor receptor (EGFr) in five out of five human glioma cell lines (U-251MG, U-105MG, D-65MG, D-54MG, and CH-235MG) and in eight human GBM tumor surgical specimens. In vitro experiments with glioma cell lines revealed a consistent and reliable relation between EGFr activation and VEGF. . . A4.6.1, a monoclonal antibody to VEGF, completely abolished VEGF-mediated [Ca2+]i transients in HUVECs. Likewise, induction by glioma-derived CM of von Willebrand factor release from HUVECs was completely blocked by A4.6.1 pretreatment. These observations provide a key link in understanding the basic cellular pathophysiology of GBM tumor angiogenesis, increased vascular permeability, and cellular proliferation. Specifically, EGF activation of EGFr expressed on glioma cells leads to enhanced secretion of VEGF by. . . glioma cells. VEGF released by glioma cells in situ most likely accounts for pathognomonic histopathologic and clinical features of GBM tumors in patients, including striking tumor angiogenesis, increased cerebral edema and hypercoagulability manifesting as focal tumor necrosis, deep vein thrombosis, or pulmonary embolism.

L9 ANSWER 179 OF 215 MEDLINE DUPLICATE 143
ACCESSION NUMBER: 92390409 MEDLINE
DOCUMENT NUMBER: 92390409 PubMed ID: 1325648
TITLE: Brain vascular endothelial cells express JC virus large tumor antigen in immunocompetent and cyclophosphamide-treated hamsters.
AUTHOR: Ressetar H G; Webster H D; Stoner G L
CORPORATE SOURCE: Laboratory of Experimental Neuropathology, National Institute of Neurological Disorders and Stroke, National Institutes of Health, Bethesda, MD 20892.
SOURCE: PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, (1992 Sep 1) 89 (17) 8170-4.
Journal code: PV3; 7505876. ISSN: 0027-8424.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199210
ED Entered STN: 19921023
Last Updated on STN: 19921023
Entered Medline: 19921007

AB When injected intracerebrally into newborn hamsters, the human polyomavirus JC virus (JCV) establishes a nonproductive infection resulting in brain tumor formation. Using immunostaining methods to detect the JCV regulatory protein, large tumor antigen (T antigen), we have now demonstrated JCV infection of brain vascular endothelial cells (EC) in infected hamsters. JCV T antigen was detected in lectin-labeled EC as well as in von Willebrand factor-expressing EC in both cyclophosphamide-treated and nonimmunosuppressed hamster brains 16, 21, and 31 days after birth. Cyclophosphamide-treated hamsters exhibited a. . .

L9 ANSWER 180 OF 215 MEDLINE DUPLICATE 144
ACCESSION NUMBER: 93059436 MEDLINE
DOCUMENT NUMBER: 93059436 PubMed ID: 1279183
TITLE: Role of the SIKVAV site of laminin in promotion of angiogenesis and tumor growth: an in vivo Matrigel model.
AUTHOR: Kibbey M C; Grant D S; Kleinman H K
CORPORATE SOURCE: Laboratory of Developmental Biology, National Institute of Dental Research, Bethesda, Md. 20892.
SOURCE: JOURNAL OF THE NATIONAL CANCER INSTITUTE, (1992 Nov 4) 84 (21) 1633-8.
Journal code: J9J; 7503089. ISSN: 0027-8874.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199211
ED Entered STN: 19930122
Last Updated on STN: 19960129
Entered Medline: 19921127

AB BACKGROUND: Angiogenesis (vascularization) has a critical role in tumor growth and metastasis, and peptides containing the SIKVAV amino acid sequence (Ser-Ile-Lys-Val-Ala-Val) have been shown to stimulate many angiogenic activities. . . A protein chain and containing the SIKVAV amino acid sequence. We also examined the ability of the peptide to enhance tumor growth in vivo. METHODS: The SIKVAV-containing peptide was mixed with Matrigel, a reconstituted basement membrane extract used to assay stimulation. . . plug was excised, and angiogenic activity was assessed by histologic examination and immunohistochemical staining with an antibody to the von Willebrand factor (vWF), an endothelium-specific antigen. In other experiments, the mixture of peptide and Matrigel was co-injected with B16F10 murine melanoma cells into C57BL/6 mice, and the resultant tumors were assessed for size and vascularization. RESULTS: When co-injected with Matrigel at doses as low as 10 micrograms, the SIKVAV-containing peptide stimulated angiogenesis fourfold greater than. . . in a dose-dependent manner up to a 100-micrograms dose. When co-injected with Matrigel and B16F10 melanoma cells, the peptide enhanced tumor growth by approximately 2.5-fold, and tumor vascularization was significantly increased ($P = .027$) over that observed after injection with melanoma cells and Matrigel alone. CONCLUSIONS: These data demonstrate that the laminin-derived SIKVAV-containing peptide is angiogenic in a new in vivo model system and can enhance tumor vascularization and growth.

L9 ANSWER 181 OF 215 MEDLINE
ACCESSION NUMBER: 93165015 MEDLINE
DOCUMENT NUMBER: 93165015 PubMed ID: 1287459
TITLE: Vascular proliferation in the stroma of gastric cancer and its significance.
AUTHOR: Kita T; Hirano T; Asano G; Shoji T
CORPORATE SOURCE: Department of Pathology, Nippon Medical School, Tokyo, Japan.
SOURCE: NIPPON GEKA GAKKAI ZASSHI. JOURNAL OF JAPAN SURGICAL SOCIETY, (1992 Dec) 93 (12) 1465-73.
Journal code: NGG; 0405405. ISSN: 0301-4894.
PUB. COUNTRY: Japan
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: Japanese
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199303
ED Entered STN: 19930402

Last Updated on STN: 19930402
Entered Medline: 19930316

AB To elucidate vascular characteristics in the stroma of gastric cancer, the morphological and immunohistochemical changes of vascular components were examined in 27 gastric cancers and 7 noncancer gastric tissues including 2 peptic ulcers. In differentiated adenocarcinoma, a large number of blood vessels were observed in vicinity of the cancer glands and type IV collagen (C-IV) was localized around the blood vessels and cancer glands, and ultrastructurally, cytoplasmic organelle and weibel-Palade bodies were encountered in the endothelium. In poorly differentiated adenocarcinoma, a small number of blood vessels were distributed sporadically in the stroma and there were vascular endothelia in which von Willebrand factor (VWF) was localized, and there were much more endothelia in which VWF was not localized compared with differentiated adenocarcinoma. C-IV was localized only around the blood vessels and OKM5 was localized in the endothelia which were distributed in the center of cancer nest in poorly differentiated adenocarcinoma. Ultrastructurally, there were not so many Weibel-Palade bodies in the endothelia without complete basement membrane. The morphological and functional changes of blood vessels were correlated with cancer differentiation and metastasis. These changes may provide biological feature of cancer and may be induced by cancer cells, vascular endothelia and mesenchymal cells.

L9 ANSWER 182 OF 215 MEDLINE DUPLICATE 145
ACCESSION NUMBER: 92325508 MEDLINE
DOCUMENT NUMBER: 92325508 PubMed ID: 1378077
TITLE: Regulation of vascular cell adhesion molecule 1 on human dermal microvascular endothelial cells.
AUTHOR: Swerlick R A; Lee K H; Li L J; Sepp N T; Caughman S W; Lawley T J
CORPORATE SOURCE: Department of Dermatology, Emory University, Atlanta, GA 30322.
CONTRACT NUMBER: RO1 AR 36632 (NIAMS)
SOURCE: JOURNAL OF IMMUNOLOGY, (1992 Jul 15) 149 (2) 698-705.
Journal code: IFB; 2985117R. ISSN: 0022-1767.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 199208
ED Entered STN: 19920821
Last Updated on STN: 19960129
Entered Medline: 19920811

AB Vascular endothelial cell adhesion molecule 1 (VCAM-1) is an adherence molecule that is induced on endothelial cells by cytokine stimulation and can mediate binding of lymphocytes or tumor cells to endothelium. Because these interactions often occur at the level of the microvasculature, we have examined the regulation of. . . large vessel human umbilical vein endothelial cells (HUVEC). Both cell populations were judged pure as assessed by expression of von Willebrand factor and uptake of acetylated low density lipoprotein. Expression of VCAM-1 was not detectable on either unstimulated HDMEC or HUVEC. . . for the existence of endothelial cell heterogeneity and differences in cell adhesion molecule regulation on endothelial cells derived from different vascular beds.

L9 ANSWER 183 OF 215 MEDLINE DUPLICATE 146
ACCESSION NUMBER: 93002480 MEDLINE
DOCUMENT NUMBER: 93002480 PubMed ID: 1390247
TITLE: Red blood cells from patients with sickle cell disease exhibit an increased adherence to cultured endothelium pretreated with tumour necrosis factor (TNF).
AUTHOR: Vordermeier S; Singh S; Biggerstaff J; Harrison P; Grech H; Pearson T C; Dumonde D C; Brown K A
CORPORATE SOURCE: Department of Immunology, UMDS, St Thomas' Hospital, London.
SOURCE: BRITISH JOURNAL OF HAEMATOLOGY, (1992 Aug) 81 (4) 591-7.
Journal code: AXC; 0372544. ISSN: 0007-1048.
PUB. COUNTRY: ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199211
ED Entered STN: 19930122
Last Updated on STN: 19930122
Entered Medline: 19921113

AB . . . cells (RBCs) from 24 patients with sickle cell disease were more adherent to cultured endothelium pretreated with the inflammatory cytokine, tumour necrosis factor (TNF) than RBCs from 22 healthy subjects. The enhanced sticking was apparent in RBC preparations from patients who. . . adhesion to TNF-treated endothelium may be the low surface change of sickle RBCs, and increased levels of fibrinogen and von Willebrand's factor (vWF) in the patients' plasma. By acting on vascular endothelium to increase its adhesiveness for sickled RBCs, it is concluded that inflammatory cytokines such as TNF may have a. . .

L9 ANSWER 184 OF 215 MEDLINE DUPLICATE 147
ACCESSION NUMBER: 93060899 MEDLINE
DOCUMENT NUMBER: 93060899 PubMed ID: 1279270
TITLE: A simple, quantitative method for assessing angiogenesis and antiangiogenic agents using reconstituted basement membrane, heparin, and fibroblast growth factor.
AUTHOR: Passaniti A; Taylor R M; Pili R; Guo Y; Long P V; Haney J A; Pauly R R; Grant D S; Martin G R
CORPORATE SOURCE: Laboratory of Biological Chemistry, National Institute on Aging, National Institutes of Health, Bethesda Maryland.
SOURCE: LABORATORY INVESTIGATION, (1992 Oct) 67 (4) 519-28.
Journal code: KZ4; 0376617. ISSN: 0023-6837.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199212
ED Entered STN: 19930122
Last Updated on STN: 19980206
Entered Medline: 19921207

AB BACKGROUND: Blood vessel growth is necessary for normal tissue homeostatis and contributes to solid tumor growth. Methods to quantitate neovascularization should be useful in testing biological factors and drugs that regulate angiogenesis or to induce a vascular supply .

to promote wound healing. EXPERIMENTAL DESIGN: An extract of basement membrane proteins (Matrigel) was found to reconstitute into a gel when injected subcutaneously into C57/BL mice and to support an intense vascular response when supplemented with angiogenic factors. RESULTS: New vessels and von Willebrand factor antigen staining were apparent in the gel 2-3 days after injection, reaching a maximum after 3-5 days. Hemoglobin content. . . growth factor BB, interleukin 1-beta, interleukin-6, and transforming growth factor-beta were potent inhibitors of neovascularization induced by fibroblast growth factor. Tumor necrosis factor-alpha did not alter the response but was alone a potent inducer of neovascularization when coinjected with Matrigel and. . .

L9 ANSWER 185 OF 215 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1993:93693 CAPLUS
DOCUMENT NUMBER: 118:93693
TITLE: A simple, quantitative method for assessing angiogenesis and antiangiogenic agents using reconstituted basement membrane, heparin, and fibroblast growth factor
AUTHOR(S): Passaniti, Antonino; Taylor, Robert M.; Pili, Roberto; Guo, Yue; Long, Peter V.; Haney, Joseph A.; Pauly, Rebecca R.; Grant, Derrick S.; Martin, George R.
CORPORATE SOURCE: Gerontol. Res. Cent., Natl. Inst. Aging, Bethesda, MD, USA
SOURCE: J. Neurosurg. (1992), 77(5), 519-28
CODEN: JONSAC; ISSN: 0022-3085
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Blood vessel growth is necessary for normal tissue homeostasis and contributes to solid tumor growth. Methods to quantitate neovascularization should be useful in testing biol. factors and drugs that regulate angiogenesis or to induce a vascular supply a promote wound healing. An ext. of basement membrane proteins (matrigel) was found to reconstitute into a gel when injected s.c. into C57/BL mice and to support an intense vascular response when supplemented with angiogenic factors. New vessels and von Willebrand factor antigen staining were apparent in the gel 2-3 days after injection, reaching a max. after 3-5 days. Hb content of the gels was found to parallel the increase in vessels in the gel allowing ready quantitation. Angiogenesis was obtained with both acidic and basic fibroblast growth factors and was enhanced by heparin. Several substances were tested for angiostatic activity in this assay by coinjection in Matrigel with fibroblast growth factor and heparin. Platelet-derived growth factor BB, interleukin 1-.beta., interleukin 6, and transforming growth factor-.beta. were potent inhibitors of neovascularization induced by fibroblast growth factor. Tumor necrosis factor-.alpha. did not alter the response but was alone a potent inducer of neovascularization when coinjected with Matrigel and heparin. Consistent with the previously demonstrated importance of collagenase in mediating endothelial cell invasion, a tissue inhibitor of metalloproteinases that also inhibits collagenases was found to be a potent inhibitor of fibroblast growth-induced angiogenesis. Our assay allows the ready quant. assessment of angiogenic and antiangiogenic factors and should be useful in the isolation of endothelial cells from the capillaries that penetrate into the gel.

L9 ANSWER 186 OF 215 MEDLINE DUPLICATE 148
ACCESSION NUMBER: 92260096 MEDLINE
DOCUMENT NUMBER: 92260096 PubMed ID: 1583402
TITLE: von Willebrand factor interacts with malignant hematopoietic cell lines: evidence for the presence of specific binding sites and modification of von Willebrand factor structure and function.
COMMENT: Comment in: J Lab Clin Med. 1992 May;119(5):444-7
AUTHOR: Floyd C M; Irani K; Kind P D; Kessler C M
CORPORATE SOURCE: Division of Hematology/Oncology, George Washington University Medical Center, Washington, D.C. 20037.
SOURCE: JOURNAL OF LABORATORY AND CLINICAL MEDICINE, (1992 May) 119 (5) 467-76.
Journal code: IVR; 0375375. ISSN: 0022-2143.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 199206
ED Entered STN: 19920626
Last Updated on STN: 19970203
Entered Medline: 19920618
AB von Willebrand factor (vWf) mediates the adherence of platelets to exposed vascular subendothelium. During hematogenous metastasis in certain model systems, platelets are also deposited at endothelial surfaces in heterotypic aggregates with tumor cells. The role of vWf in this metastatic event was investigated by examining the interaction between purified iodine 125-labeled vWf and the human tumor cell lines, U937 and CA46. vWf-tumor cell binding was specific, partially reversible, and saturable at 4 degrees C. At 37 degrees C, however, U937 cell binding sites could not be saturated, suggesting endocytosis as a possible mechanism of interaction. When constant amounts of vWf were added, interactions with tumor cells were complete after 60 minutes, but rapidly dissociated over the next 2 hours. With the addition of specific proteinase inhibitors, vWf remained in stable association with tumor cells throughout a 3-hour time course. Loss of vWf antigen in supernatant samples complemented the 125I-labeled vWf bound directly to tumor cells. However, disproportionately large reductions in vWf functional activity were observed and correlated with alterations in multimeric structure. These data suggest an initial binding of vWf to some tumor cells, followed by a time-dependent loss of structural and functional integrity. vWf may contribute to tumor cell arrest within the microvasculature and may influence other tumor cell-subendothelial interactions as the adhesive function of vWf is subsequently modified.

L9 ANSWER 187 OF 215 MEDLINE DUPLICATE 149
ACCESSION NUMBER: 91273109 MEDLINE
DOCUMENT NUMBER: 91273109 PubMed ID: 1711288
TITLE: Differential expression of markers for endothelial cells, pericytes, and basal lamina in the microvasculature of tumors and granulation tissue.
AUTHOR: Schlingemann R O; Rietveld F J; Kwaspen F; van de Kerkhof P C; de Waal R M; Ruiter D J

CORPORATE SOURCE: Department of Pathology, Nijmegen University Cancer Center, The Netherlands.
SOURCE: AMERICAN JOURNAL OF PATHOLOGY, (1991 Jun) 138 (6) 1335-47. Journal code: 3RS; 0370502. ISSN: 0002-9440.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 199107
ED Entered STN: 19910811
Last Updated on STN: 19960129
Entered Medline: 19910725

AB The structure and function of the **tumor** microvasculature is of great interest for **cancer** biology, diagnosis, and therapy. The distribution of endothelial cells, pericytes, and basal lamina in **tumors** is not well documented. In this study, the authors investigated the distribution of markers for these different components in a series of malignant human **tumors** and in human granulation tissue, both situations with extensive angiogenesis. Their results show a striking heterogeneity in the expression of markers for pericytes and endothelial cells between different **tumors**, but also within a single **tumor** lesion. To be able to distinguish between these two adjacent cell types decisively, all marker studies were carried out both. . . . of decubitus lesions, well-defined zones with increasing levels of maturation can be delineated. It was found that antibodies recognizing von **Willebrand** factor often failed to stain the **tumor** capillaries. Of the pericyte markers, alpha-smooth muscle actin was only locally expressed by pericytes in the **tumor vasculature**, whereas the high-molecular-weight melanoma-associated antigen, a chondroitin sulfate proteoglycan, stained the microvasculature broadly. Staining of the basal lamina components collagen type IV and laminin was, within the **tumor**, not restricted to the microvasculature. From their findings the authors conclude that 1) for the visualization of the **tumor vasculature**, antibodies recognizing endothelial markers, especially monoclonal antibodies PAL-E and BMA 120, are preferable to those recognizing pericytes or basal lamina; 2) within the microvasculature of **tumors** and granulation tissue, a heterogeneity of expression of endothelial and pericyte markers is observed; 3) during the formation of granulation. . .

L9 ANSWER 188 OF 215 MEDLINE DUPLICATE 150
ACCESSION NUMBER: 92071046 MEDLINE
DOCUMENT NUMBER: 92071046 PubMed ID: 1660037
TITLE: Cell proliferation and vascularization in human breast carcinomas.
AUTHOR: Monschke F; Muller W U; Winkler U; Streffer C
CORPORATE SOURCE: Institut fur Medizinische Strahlenbiologie, Universitat Gesamthochschule Essen, Germany.
SOURCE: INTERNATIONAL JOURNAL OF CANCER, (1991 Dec 2) 49 (6) 812-5. Journal code: GQU; 0042124. ISSN: 0020-7136.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199201
ED Entered STN: 19920124
Last Updated on STN: 19970203
Entered Medline: 19920103

AB Cell proliferation and **vascularization** were studied in 10 human breast carcinomas by an immunoenzyme technique. The monoclonal antibody (MAb) Ki-67 was used as a marker for proliferating cells and a polyclonal antibody directed against human von-**Willebrand** factor to identify blood vessels. The proportion of Ki-67-labelled cells varied from 1% to 20%, the number of small blood vessels from 4.4/mm2 to 57.6/mm2. Within single histological sections of individual **tumours** the percentage of proliferating cells was not related to the number of small blood vessels. However, after evaluation of 5 sections of each **tumour**, the average values showed that **tumours** with a high grade of **vascularization** had a higher percentage of Ki-67-positive cells than poorly **vascularized** samples. The influence of **vascular** density on cell proliferation was investigated in a selected area of one of the **tumours** (in 2-dimensions) and with regard to the over- and underlying sections (in 3-dimensions). After 2-dimensional evaluation, distances from proliferating cells. . .

L9 ANSWER 189 OF 215 MEDLINE DUPLICATE 151
ACCESSION NUMBER: 92155610 MEDLINE
DOCUMENT NUMBER: 92155610 PubMed ID: 1786938
TITLE: Evaluation of endothelial markers in detecting blood and lymphatic channel invasion in pT1 transitional carcinoma of bladder.
AUTHOR: Ramani P; Birch B R; Harland S J; Parkinson M C
CORPORATE SOURCE: Department of Histopathology, University College, London, UK.
SOURCE: HISTOPATHOLOGY, (1991 Dec) 19 (6) 551-4. Journal code: GB4; 7704136. ISSN: 0309-0167.
PUB. COUNTRY: ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199203
ED Entered STN: 19920410
Last Updated on STN: 19920410
Entered Medline: 19920326

AB . . . high-grade (G2 and G3) transitional cell carcinoma of bladder invading the lamina propria--stage pT1, retraction artifact was often misdiagnosed as **vascular**/lymphatic **tumour** invasion. **Vascular**/lymphatic infiltration was diagnosed in five cases based on haematoxylin and eosin stained sections, but confirmed in only two of these using immunohistochemical techniques to demonstrate endothelial markers. Of the latter, these preparations demonstrating von-**Willebrand** factor and binding the monoclonal antibody QBEND/10 were technically superior to those in which Ulex europaeus agglutinin 1 was used. It is unlikely that the demonstration of **vascular** /lymphatic infiltration, a rare feature, will prove of value in defining prognostic groups for treatment.

L9 ANSWER 190 OF 215 MEDLINE
ACCESSION NUMBER: 92169935 MEDLINE
DOCUMENT NUMBER: 92169935 PubMed ID: 1792690
TITLE: Heterogeneity of the endothelial cell and its role in organ preference of tumour metastasis.

AUTHOR: McCarthy S A; Kuzu I; Gatter K C; Bicknell R
CORPORATE SOURCE: Nuffield Dept of Pathology, University of Oxford, John Radcliffe Hospital, UK.
SOURCE: TRENDS IN PHARMACOLOGICAL SCIENCES, (1991 Dec) 12 (12) 462-7. Ref: 52
Journal code: WFT; 7906158. ISSN: 0165-6147.
PUB. COUNTRY: ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199204
ED Entered STN: 19920417
Last Updated on STN: 19920417
Entered Medline: 19920402

AB The vascular endothelium is a remarkably heterogeneous organ. In addition to well-characterized anatomical diversity in situ, specific differences are increasingly being recognized. . . . between surface antigens on endothelial cells from different tissues, including absence of the classic endothelial marker factor VIII-related antigen (von Willebrand factor) from many endothelial cells. Microvascular heterogeneity extends to properties of endothelial cells thought to be involved in tumour angiogenesis and metastasis, such as growth factor responsiveness and expression of cell adhesion molecules. These findings are not only of. . . . and characterization of cultured endothelial cells, but, as Roy Bicknell and colleagues discuss, may explain the phenomenon of preferential organ tumour metastasis and provide novel opportunities for antitumour therapy.

L9 ANSWER 191 OF 215 MEDLINE DUPLICATE 152
ACCESSION NUMBER: 91324782 MEDLINE
DOCUMENT NUMBER: 91324782 PubMed ID: 1677983
TITLE: Effects of tumour necrosis factor and interleukin-1 on von Willebrand factor secretion from human vascular endothelial cells.
AUTHOR: Paleolog E M; Carew M A; Pearson J D
CORPORATE SOURCE: Section of Vascular Biology, MRC Clinical Research Centre, Harrow, Middlesex UK.
SOURCE: INTERNATIONAL JOURNAL OF RADIATION BIOLOGY, (1991 Jul-Aug) 60 (1-2) 279-85.
Journal code: IRB; 8809243. ISSN: 0955-3002.
PUB. COUNTRY: ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199109
ED Entered STN: 19910929
Last Updated on STN: 19950206
Entered Medline: 19910906

TI Effects of tumour necrosis factor and interleukin-1 on von Willebrand factor secretion from human vascular endothelial cells.

L9 ANSWER 192 OF 215 MEDLINE DUPLICATE 153
ACCESSION NUMBER: 91103256 MEDLINE
DOCUMENT NUMBER: 91103256 PubMed ID: 1987767
TITLE: Tumor-secreted vascular permeability factor increases cytosolic Ca2+ and von Willebrand factor release in human endothelial cells.
AUTHOR: Brock T A; Dvorak H F; Senger D R
CORPORATE SOURCE: Hypertension Program, University of Alabama, Birmingham, AL 35294.
CONTRACT NUMBER: CA 40624 (NCI)
CA 43967 (NCI)
HL 41180 (NHLBI)
SOURCE: AMERICAN JOURNAL OF PATHOLOGY, (1991 Jan) 138 (1) 213-21.
Journal code: 3RS; 0370502. ISSN: 0002-9440.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 199102
ED Entered STN: 19910329
Last Updated on STN: 19910329
Entered Medline: 19910215

TI Tumor-secreted vascular permeability factor increases cytosolic Ca2+ and von Willebrand factor release in human endothelial cells.

AB Vascular permeability factor (VPF), a tumor-secreted heparin-binding protein (Mr approximately 38,000), is responsible for increased vessel permeability and fluid accumulation associated with tumor growth. Vascular permeability factor also promotes the growth of human umbilical vein endothelial cells (EC) and bovine pulmonary ECs in vitro. It. . . . EC [Ca2+]i. Similar to other mediators that increase [Ca2+]i in cultured ECs, VPF also induced a 200% increase in von Willebrand factor release. Together these data indicate that VPF acts directly on ECs and that rapid cellular events in its in vivo/in vitro actions are likely to involve phospholipase C activation, [Ca2+]i increase, and von Willebrand factor release.

L9 ANSWER 193 OF 215 MEDLINE DUPLICATE 154
ACCESSION NUMBER: 91147581 MEDLINE
DOCUMENT NUMBER: 91147581 PubMed ID: 1705261
TITLE: Endothelial markers in malignant vascular tumours of the liver: superiority of QB-END/10 over von Willebrand factor and Ulex europaeus agglutinin 1.
AUTHOR: Anthony P P; Ramani P
CORPORATE SOURCE: Area Department of Pathology, Royal Devon Hospital, Postgraduate Medical School, University of Exeter, Heavitree.
SOURCE: JOURNAL OF CLINICAL PATHOLOGY, (1991 Jan) 44 (1) 29-32.
Journal code: HT3; 0376601. ISSN: 0021-9746.
PUB. COUNTRY: ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 199104
ED Entered STN: 19910419
Last Updated on STN: 19960129
Entered Medline: 19910404

TI Endothelial markers in malignant vascular tumours of

the liver: superiority of QB-END/10 over von Willebrand factor and Ulex europaeus agglutinin 1.

AB . . . antigen in human endothelial cell membranes and haemopoietic progenitor cells, was studied for its usefulness as a marker of neoplastic vascular cells in 21 angiosarcomas and seven malignant haemangioendotheliomas of the liver. QB-END/10 was both more sensitive and more specific than Von Willebrand factor (VWF) and Ulex europaeus 1 agglutinin (UEA-1) in labelling endothelial cells and it did not cross react with epithelia as UEA-1 often does. Staining was uniformly strong and clear in all histological variants of these two tumours. QB-END/10 should prove particularly useful in the differential diagnosis of malignant vascular tumours of the liver.

L9 ANSWER 194 OF 215 MEDLINE DUPLICATE 155
ACCESSION NUMBER: 91298312 MEDLINE
DOCUMENT NUMBER: 91298312 PubMed ID: 1712541
TITLE: The human hematopoietic progenitor cell antigen (CD34) in vascular neoplasia.
AUTHOR: Traweek S T; Kandalaft P L; Mehta P; Battifora H
CORPORATE SOURCE: Sylvia Cowan Laboratory of Surgical Pathology, City of Hope National Medical Center, Duarte, California 91010.
CONTRACT NUMBER: CA-33572 (NCI)
RO1 CA-37194 (NCI)
SOURCE: AMERICAN JOURNAL OF CLINICAL PATHOLOGY, (1991 Jul) 96 (1) 25-31.
Journal code: 3FK; 0370470. ISSN: 0002-9173.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 199108
ED Entered STN: 19910901
Last Updated on STN: 19960129
Entered Medline: 19910812

AB . . . also have been reported to stain blood vessels in tissue sections, and, more recently, CD34 mRNA has been detected in vascular endothelial cells. Therefore, the authors studied the diagnostic utility of immunohistochemical CD34 antigen detection in tumors of endothelial cell derivation and compared the results with stains for von Willebrand (vW) factor. A wide variety of epithelial and mesenchymal neoplasms also were examined to assess the specificity of CD34 for vascular neoplasia. Seven cases of angiosarcoma (seven of seven), five cases of Kaposi's sarcoma (five of five), and eight cases of. . . than the angiosarcomas, Kaposi's sarcomas, or hemangioendotheliomas. Five of six cases of hemangioma also stained positively for CD34; the nonreactive tumor in this group was the only one among 28 vascular neoplasms studied that was not reactive for CD34. In comparison, 9 of the 28 vascular tumors did not stain for vW factor. Three hundred fifty-seven tumors of nonvascular derivation also were examined for CD34 antigen expression. Focal light staining was seen in one pulmonary squamous cell. . . of leiomyosarcomas (3 of 22). These findings indicate that CD34 is a sensitive and relatively specific marker for neoplasms of vascular origin.

L9 ANSWER 195 OF 215 MEDLINE DUPLICATE 156
ACCESSION NUMBER: 91300729 MEDLINE
DOCUMENT NUMBER: 91300729 PubMed ID: 2070557
TITLE: Vascular damage in Wegener's granulomatosis and microscopic polyarteritis: presence of anti-endothelial cell antibodies and their relation to anti-neutrophil cytoplasm antibodies.
AUTHOR: Savage C O; Pottinger B E; Gaskin G; Lockwood C M; Pusey C D; Pearson J D
CORPORATE SOURCE: Section of Vascular Biology, MRC Clinical Research Centre, Harrow, UK.
SOURCE: CLINICAL AND EXPERIMENTAL IMMUNOLOGY, (1991 Jul) 85 (1) 14-9.
Journal code: DD7; 0057202. ISSN: 0009-9104.
PUB. COUNTRY: ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199108
ED Entered STN: 19910908
Last Updated on STN: 19910908
Entered Medline: 19910819

AB To define mechanisms of vascular injury in Wegener's granulomatosis and microscopic polyarteritis, anti-endothelial cell antibodies (AECA) were sought in serum from 168 patients, all of. . . endothelial cells (HUVEC), IgG AECA were demonstrated in 59% and IgM AECA in 68% of patients. Pretreatment of HUVEC with tumour necrosis factor (TNF), IL-1 or interferon-gamma (IFN-gamma) led to increased binding. Adsorption of AECA/ANCA-containing serum with HUVEC or neutrophils demonstrated that AECA and ANCA recognized different targets. von Willebrand factor (vWf) antigen levels in the patient samples were markedly elevated, with a mean of 3.10 +/- 1.89 U/ml (control population mean. . . not appear to support complement-mediated cytotoxicity, but a proportion can support antibody-dependent cellular cytotoxicity, suggesting that they may contribute to vascular injury.

L9 ANSWER 196 OF 215 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1990:476249 CAPLUS
DOCUMENT NUMBER: 113:76249
TITLE: .gamma.-Interferon modulates von Willebrand factor release by cultured human endothelial cells
AUTHOR(S): Tannenbaum, Susan H.; Gralnick, Harvey R.
CORPORATE SOURCE: Dep. Clin. Cent., Natl. Inst. Health, Bethesda, MD, 20892, USA
SOURCE: Blood (1990), 75(11), 2177-84
CODEN: BLOOAW; ISSN: 0006-4971
DOCUMENT TYPE: Journal
LANGUAGE: English
IT Lymphokines and Cytokines
RL: BIOL (Biological study)
(tumor necrosis factor, von Willebrand factor release by vascular endothelium modulation by human)

L9 ANSWER 197 OF 215 MEDLINE DUPLICATE 157
ACCESSION NUMBER: 91055744 MEDLINE
DOCUMENT NUMBER: 91055744 PubMed ID: 2242851
TITLE: QBEND/10, a new monoclonal antibody to endothelium:

assessment of its diagnostic utility in paraffin sections.
AUTHOR: Ramani P; Bradley N J; Fletcher C D
CORPORATE SOURCE: Department of Histopathology, University College and Middlesex School of Medicine, Cambridge, UK.
SOURCE: HISTOPATHOLOGY, (1990 Sep) 17 (3) 237-42.
Journal code: GB4; 7704136. ISSN: 0309-0167.
PUB. COUNTRY: ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199101
ED Entered STN: 19910222
Last Updated on STN: 19970203
Entered Medline: 19910103

AB The immunoreactivity of a new monoclonal antibody to endothelium. QBEND/10, in formalin-fixed, paraffin-embedded sections from a variety of **vascular** and lymphatic **tumours** is described and compared to that of two other endothelial markers, von **Willebrand** factor and Ulex europaeus agglutinin, type 1. All the benign **tumours** of blood **vascular** origin showed immunoreactivity whereas only five out of eight lymphangiomas demonstrated a weak focal reaction with QBEND/10. Primitive lumina in epithelioid and spindle cell haemangioendotheliomas were highlighted in all the cases. **Tumour** cells in angiosarcoma forming vasoformative areas and solid areas showed immunopositivity to QBEND/10 in 17/23 and 13/24 cases respectively, and complementary immunoreactivity for von **Willebrand** factor was observed. Proliferating vessels and the majority of spindle cells in Kaposi's sarcoma were positive in all 40 cases. Only one of 54 cases of carcinoma showed luminal reaction to QBEND/10. However, 17 of 45 spindle cell **tumours** displayed a positive reaction. QBEND/10 is an additional marker for demonstrating endothelial differentiation and has some advantages over currently available. . .

L9 ANSWER 198 OF 215 MEDLINE DUPLICATE 158
ACCESSION NUMBER: 90296565 MEDLINE
DOCUMENT NUMBER: 90296565 PubMed ID: 2113738
TITLE: Differing microvasculature in the two major types of gastric carcinoma: a conventional, ultrastructural and ultrastructural immunolocalization study of von Willebrand factor.
AUTHOR: Ohtani H; Nagura H
CORPORATE SOURCE: Department of Pathology, Tohoku University School of Medicine, Sendai, Japan.
SOURCE: VIRCHOWS ARCHIV. A, PATHOLOGICAL ANATOMY AND HISTOPATHOLOGY, (1990) 417 (1) 29-35.
Journal code: XD1; 8302198. ISSN: 0174-7398.
PUB. COUNTRY: GERMANY, WEST: Germany, Federal Republic of
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199007
ED Entered STN: 19900907
Last Updated on STN: 19900907
Entered Medline: 19900727

AB The microvasculature of the stroma of human gastric carcinoma was studied by immuno-electron microscopy for factor VIII/von **Willebrand** factor (**vWF**) and conventional electron microscopy. In differentiated type (intestinal) gastric carcinoma (9 cases), capillaries were distributed more densely around carcinoma cell nests. **vWF** was localized in endothelial cells and neighbouring stroma. Ultrastructurally, capillary endothelial cells showed considerable hypertrophic changes with well-developed rough endoplasmic reticulum (rER). **vWF** was localized in well-developed rER, granules, Weibel-Palade bodies (WPB), in the **vascular** lumen as clusters, and diffusely deposited in the subendothelium. This indicates that endothelial cells in this group are transformed into. . . production. In undifferentiated type (diffuse) gastric carcinoma (12 cases), capillaries were uniformly distributed and endothelial hypertrophic changes were less remarkable. **vWF** was localized in WPB, scanty rER and subendothelial matrix. Solid capillary buds were observed in both types; they were composed of a solid strand of endothelial cells without a visible lumen. Our results reveal that the microvasculature in **tumour** stroma differs significantly according to its histological type.

L9 ANSWER 199 OF 215 MEDLINE DUPLICATE 159
ACCESSION NUMBER: 90139667 MEDLINE
DOCUMENT NUMBER: 90139667 PubMed ID: 2616816
TITLE: The effect of radiation therapy on von Willebrand factor in patients with angiosarcoma.
AUTHOR: Smith R E; Janjan N; Kretzschmar S; Hackbarth D
CORPORATE SOURCE: Department of Medicine, Medical College of Wisconsin, Milwaukee.
SOURCE: RADIOTHERAPY AND ONCOLOGY, (1989 Dec) 16 (4) 297-304.
Journal code: RAE; 8407192. ISSN: 0167-8140.
PUB. COUNTRY: Netherlands
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199002
ED Entered STN: 19900328
Last Updated on STN: 19900328
Entered Medline: 19900227

AB . . . tissues. Shortly after radiation injury platelet thrombi cause small vessel obstruction. Radiation doses of 20 Gy or higher release von **Willebrand** factor (**VWF**) from cultured human umbilical vein EC. Angiosarcoma (AS) is a **vascular tumor** with abnormal appearing EC which have detectable cytoplasmic **VWF**. We examined the effect of radiation therapy on **VWF** in three patients with AS. Each patient's malignant tissue was demonstrated to have cytoplasmic **VWF** present. Venous blood samples were drawn immediately before and at weekly intervals during treatment. Patient 1 received 80 Gy over 6 weeks and had no alterations in the **VWF**. Patient 2 received 64 Gy over 6 weeks and was noted to have loss of the high molecular weight multimers of **VWF** without loss of FVIII:C, VW: RIST, or von **Willebrand** antigen activity (VW:Ag). Patient 3 was treated with 64.4 Gy over 9 weeks and had a disproportionate increase of the. . . of therapy. These changes were minimal and might be explained by either limited local release or no increased release of **VWF** from the irradiated tissue. The minimally abnormal multimeric pattern in patient 2 may be due to the release of an abnormal **VWF** in normal amounts or small amounts of proteolysis. The alteration in the VW: RIST and VW: Ag to FVIII: C. . .

L9 ANSWER 200 OF 215 MEDLINE DUPLICATE 160
ACCESSION NUMBER: 89327997 MEDLINE
DOCUMENT NUMBER: 89327997 PubMed ID: 2666520
TITLE: Monoclonal antibody-defined human endothelial antigens as vascular markers.
AUTHOR: Ruiter D J; Schlingemann R O; Rietveld F J; de Waal R M
CORPORATE SOURCE: Department of Pathology, University Hospital Nijmegen, The Netherlands.
SOURCE: JOURNAL OF INVESTIGATIVE DERMATOLOGY, (1989 Aug) 93 (2 Suppl) 25S-32S. Ref: 50
Journal code: IHZ; 0426720. ISSN: 0022-202X.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198909
ED Entered STN: 19900309
Last Updated on STN: 19900309
Entered Medline: 19890901
AB A review is given of human endothelial antigens recognized by monoclonal antibodies and used as **vascular** markers. These antigens can be classified tentatively into two categories that partly overlap: 1) differentiation markers and 2) antigens involved. . . distribution patterns. PAL-E and BW 200 react with the luminal endothelial surface, in a local and diffuse pattern, respectively. Anti-Von **Willebrand** factor (i.e., Factor VIII-related ag) antibodies react with Weibel-Palade bodies but also with subendothelial structures. Applications of immunohistochemistry using monoclonal antibodies in diagnostic pathology include assessment of **vascular** invasion by **cancer** cells, and identification of endothelial neoplasms and related disorders. Because anti-Factor VIII-related antigen and BW 200 are applicable on formaldehyde-fixed. . . involved in specific cellular functions also may contribute to pathobiologic research on the characterization of blood-tissue barriers, e.g., in the **tumor vascular** bed.

L9 ANSWER 201 OF 215 MEDLINE DUPLICATE 161
ACCESSION NUMBER: 88159612 MEDLINE
DOCUMENT NUMBER: 88159612 PubMed ID: 3126558
TITLE: Changes in blood coagulation and fibrinolysis in patients on different treatment regimens for prostatic cancer. Predictors for cardiovascular complications?.
AUTHOR: Blomback M; Hedlund P O; Sawe U
CORPORATE SOURCE: Dept of Clinical Chemistry and Blood Coagulation, Karolinska Hospital, Stockholm, Sweden.
SOURCE: THROMBOSIS RESEARCH, (1988 Jan 1) 49 (1) 111-21.
Journal code: VRN; 0326377. ISSN: 0049-3848.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198804
ED Entered STN: 19900308
Last Updated on STN: 19980206
Entered Medline: 19880412
AB An analysis of haemostatic variables was done in 31 prostate **cancer** patients treated with oestrogens (13 pts), estramustine phosphate (7 pts) or orchidectomy (11 pts) before, at about 7 weeks and 6 months of treatment. Six patients treated with either of the drugs developed venous thromboembolism or ischemic **vascular** disease. Already before treatment there were changes indicating some activation of blood coagulation, fibrinolysis and kallikrein systems. The drug treated. . . weeks of therapy it might be helpful in predicting cardiovascular complications to investigate platelet aggregates, prothrombin complex, factor X, von **Willebrand** factor antigen, fibrinogen, antithrombin, fibrino-peptide A, and the inhibitors of fibrinolysis as well as C1-esterase inhibitor.

L9 ANSWER 202 OF 215 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 87190548 EMBASE
DOCUMENT NUMBER: 1987190548
TITLE: Factor VIII-related antigen (von Willebrand factor antigen) in patients with prostatic disease.
AUTHOR: Ablin R.J.; Bartkus J.M.; Gonder M.J.
CORPORATE SOURCE: Department of Urology, Health Sciences Center, SUNY at Stony Brook, NY 11794-8093, United States
SOURCE: Medical Science Research, (1987) 15/17 (1033-1034).
CODEN: MSCREJ
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal
FILE SEGMENT: 016 Cancer
026 Immunology, Serology and Transplantation
028 Urology and Nephrology
LANGUAGE: English
AB Factor VIII-related antigen (FVIIIRAg) (von **Willebrand** factor antigen) in the serum of patients with prostate **cancer** (PCa), other prostatic and non-prostatic diseases was quantitated by an enzyme-linked immunosorbent assay. Significant ($P<0.05$) differences were noted between the. . . of DIC in PCa may increase consumption of the FVIII complex and stimulate the synthesis and release of FVIIIRAg from **vascular** endothelial cells resulting in increased levels of circulating FVIIIRAg. Pending further studies and the identification of other mechanisms, the foregoing. . .

L9 ANSWER 203 OF 215 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 1988:78992 BIOSIS
DOCUMENT NUMBER: BR34:35511
TITLE: RAYNAUD'S PHENOMENON AND FINGER NECROSIS AFTER TREATMENT OF AN OVARIAN SEMINOMA WITH BLEOMYCIN VINBLASTINE AND 5 FLUOROURACIL.
AUTHOR(S): WERQUIN S; KACET S; CARON J; LACROIX D; LIBERSA C; COGET J M; LEKIEFFRE J
CORPORATE SOURCE: SERV. CARDIOLOGIE A, HOPITAL CARDIOLOGIQUE, BD DU PR. J.-LECLERCQ, 59037 LILLE CEDEX.
SOURCE: Ann. Cardiol. Angeiol., (1987) 36 (8), 409-412.
CODEN: ACAABH. ISSN: 0003-3928.
FILE SEGMENT: BR; OLD
LANGUAGE: French
IT Miscellaneous Descriptors
HUMAN ANTINEOPLASTIC AGENT **CANCER** THERAPY **VASCULAR**

TOXICITY HYPERSENSITIVITY VASCULARIZATION FILTERED PLATELET ACTIVITY WILLEBRAND'S FACTOR ALTERATION PHARMACOTOXICITY

L9 ANSWER 204 OF 215 MEDLINE DUPLICATE 162
ACCESSION NUMBER: 88223209 MEDLINE
DOCUMENT NUMBER: 88223209 PubMed ID: 3450387
TITLE: Medulloblastomas in childhood: histological factors influencing patients' outcome.
AUTHOR: Taomoto K; Tomita T; Raimondi A J; Leestma J E
CORPORATE SOURCE: Division of Pediatric Neurosurgery, Children's Memorial Hospital, Chicago, IL 60614.
SOURCE: CHILDS NERVOUS SYSTEM, (1987) 3 (6) 354-60.
Journal code: CNV; 8503227. ISSN: 0256-7040.
PUB. COUNTRY: GERMANY, WEST: Germany, Federal Republic of
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198807
ED Entered STN: 19900308
Last Updated on STN: 19900308
Entered Medline: 19880714

AB . . . clinical evidence of recurrence 5 years or more after surgery. Certain histological features on light microscopic examinations (e.g., pleomorphism of tumor cells, nuclear-cytoplasmic ratio, mitotic index, degree of vascularity and endothelial proliferation) do influence patient outcome with statistical significance (P less than 0.05). Thirty out of 65 medulloblastomas were. . . examined further, using immunohistochemical methods with glial fibrillary acidic protein (GFAP), neuron specific enolase (NSE), and factor VIII/vW factor (F VIII/vWF). GFAP stain was negative in 20%, NSE stain in 13.3% and F VIII/vWF stain in 16.7% of the medulloblastomas studied. "Desmoplastic" medulloblastomas showed a strong tendency toward positive NSE and GFAP staining in. . .

L9 ANSWER 205 OF 215 MEDLINE DUPLICATE 163
ACCESSION NUMBER: 87180746 MEDLINE
DOCUMENT NUMBER: 87180746 PubMed ID: 3105228
TITLE: Selective localization of gamma-enolase in stromal cells of cerebellar hemangioblastomas.
AUTHOR: Feldenzer J A; McKeever P E
SOURCE: ACTA NEUROPATHOLOGICA, (1987) 72 (3) 281-5.
Journal code: 1CE; 0412041. ISSN: 0001-6322.
PUB. COUNTRY: GERMANY, WEST: Germany, Federal Republic of
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198705
ED Entered STN: 19900303
Last Updated on STN: 19900303
Entered Medline: 19870518

AB . . . as neuron-specific enolase. The stromal cells demonstrated positive staining for gamma-enolase, while endothelial cells and pericytes showed no reactivity. Two vascular lesions, an angiosarcoma and a cutaneous angioma, were studied and found to be nonreactive for gamma-enolase. All tumors were also tested for factor VIII/von Willebrand factor, glial fibrillary acidic protein, and the S-100 protein. The lack of expression of gamma-enolase in endothelial cells of hemangioblastomas. . .

L9 ANSWER 206 OF 215 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 1988:114238 BIOSIS
DOCUMENT NUMBER: BA85:59708
TITLE: CHARACTERIZATION OF MICROVASCULATURE IN THE STROMA OF HUMAN COLORECTAL CARCINOMA AN IMMUNOELECTRON MICROSCOPIC STUDY ON FACTOR VIII-VON WILLEBRAND FACTOR.
AUTHOR(S): OHTANI H; SASANO N
CORPORATE SOURCE: DEP. PATHOL., TOHOKU UNIV. SCH. MED., 2-1 SEIRYO-MACHI, SENDAI, 980 JPN.
SOURCE: J ELECTRON MICROSC, (1987) 36 (4), 204-212.
CODEN: JELJA7. ISSN: 0022-0744.
FILE SEGMENT: BA; OLD
LANGUAGE: English

AB Ultrastructural immunolocalization of factor VIII/von Willebrand factor (vWF) (formerly, factor VIII related antigen) was studied in microvessels in the stroma of human colorectal carcinomas (11 cases), normal mucosa and granulation tissue by the pre-embedding method. In capillaries of the normal mucosa, vWF was localized along the luminal plasma membrane, in scanty rough endoplasmic reticulum (rER), round granules, and Weibel-Palade bodies. In cancer stroma, vWF was localized in well-developed rER, round granules and Weibel-Palade bodies in hypertrophied endothelial cells, in narrow vascular lumen as a cluster, and diffusely in subendothelial space. These microvessels partly resembled newly formed immature capillaries in granulation tissue. But well-developed, immunoreactive rER were observed only in cancer stroma. We have concluded that microvasculature of human colorectal carcinoma is different from that of the normal mucosa in both ultrastructural features and immunolocalization patterns of vWF.

L9 ANSWER 207 OF 215 MEDLINE DUPLICATE 164
ACCESSION NUMBER: 86111231 MEDLINE
DOCUMENT NUMBER: 86111231 PubMed ID: 3484736
TITLE: Von Willebrand factor levels do not predict or diagnose radiation pneumonitis.
AUTHOR: Fajardo L F; Donaldson S S; Kelly N I
SOURCE: INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY, BIOLOGY, PHYSICS, (1986 Jan) 12 (1) 107-10.
Journal code: G97; 7603616. ISSN: 0360-3016.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198602
ED Entered STN: 19900321
Last Updated on STN: 19980206
Entered Medline: 19860228

AB . . . index of endothelial injury that would provide an early diagnosis of radiation pneumonitis, we investigated the plasma levels of von Willebrand Factor (Factor VIII Related Antigen, FVIII:RAg) in 14 patients undergoing pulmonary irradiation. This study was based on observations indicating that. . . FVIII:RAg, detectable in plasma. There was no correlation between FVIII:RAg levels and radiation pneumonitis, radiation dose, volume of irradiated lung, tumor

burden, or time-interval between exposure and sampling. The heterogeneity of the neoplasms and the inconstant effects of radiation in the tumor vasculature are among several variables that may explain this lack of correlation. The plasma levels of FVIII:RAg cannot be used to. . .

L9 ANSWER 208 OF 215 MEDLINE DUPLICATE 165
ACCESSION NUMBER: 84254350 MEDLINE
DOCUMENT NUMBER: 84254350 PubMed ID: 6430110
TITLE: Heterogeneous expression of factor VIII/von Willebrand factor by cardiac myxoma cells.
AUTHOR: McComb R D
CONTRACT NUMBER: NS00730 (NINDS)
SOURCE: AMERICAN JOURNAL OF SURGICAL PATHOLOGY, (1984 Jul) 8 (7) 539-44.
Journal code: 3YV; 7707904. ISSN: 0147-5185.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198408
ED Entered STN: 19900320
Last Updated on STN: 19970203
Entered Medline: 19840801

AB The expression of factor VIII/von Willebrand factor (FVIII/vWF), a marker for endothelial differentiation, was examined immunohistochemically in normal cardiac tissue and seven cardiac myxomas. In normal tissue, FVIII/vWF was detected in the surface endocardial cells and the vascular endothelial cells. In tumors, the isolated myxoma cells and the small groups and cords of myxoma cells did not express FVIII/vWF. Some of the surface cells contained FVIII/v/WF, but most did not. The predominant sites of FVIII/vWF localization were the multilayered, concentric vascular structures. In most of these, FVIII/vWF was present only in the inner layer of cells immediately surrounding the vascular lumens. In some, however, intense staining was present in both the inner and outer cell layers. In general, the FVIII/vWF -positive cells had the appearance of endothelial cells. These observations correlate with the recognized histologic, histochemical, and ultrastructural heterogeneity of cardiac. . .

L9 ANSWER 209 OF 215 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 1983:196678 BIOSIS
DOCUMENT NUMBER: BA75:46678
TITLE: STUDIES ON FACTOR-VIII COMPLEX IN VARIOUS DISEASES CORRELATION OF FACTOR-VIII RELATED ANTIGEN MEASURED BY ENZYME IMMUNOASSAY AND LAURELL TECHNIQUE.
AUTHOR(S): WADA H
CORPORATE SOURCE: SECOND DEP. INTERN. MED., FACULTY MED., MIE UNIV., TSU.
SOURCE: MIE MED J, (1982) 31 (3), 481-514.
CODEN: MMJJAI. ISSN: 0026-3532.
FILE SEGMENT: BA; OLD
LANGUAGE: English
IT Miscellaneous Descriptors
HUMAN VON WILLEBRAND DISEASE LIVER DISEASE CANCER DIABETES MELLITUS DISSEMINATED INTRA VASCULAR COAGULATION

L9 ANSWER 210 OF 215 MEDLINE DUPLICATE 166
ACCESSION NUMBER: 82268032 MEDLINE
DOCUMENT NUMBER: 82268032 PubMed ID: 6286891
TITLE: Immunohistochemical detection of factor VIII/von Willebrand factor in hyperplastic endothelial cells in glioblastoma multiforme and mixed glioma-sarcoma.
AUTHOR: McComb R D; Jones T R; Pizzo S V; Bigner D D
CONTRACT NUMBER: CA-11898 (NCI)
CA-22790 (NCI)
HL-24066 (NHLBI)
+
SOURCE: JOURNAL OF NEUROPATHOLOGY AND EXPERIMENTAL NEUROLOGY, (1982 Sep) 41 (5) 479-89.
Journal code: JBR; 2985192R. ISSN: 0022-3069.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198210
ED Entered STN: 19900317
Last Updated on STN: 19970203
Entered Medline: 19821029

AB The sarcomatous components of most glioma-sarcomas are thought to arise from the neoplastic transformation of hyperplastic endothelial and adventitial vascular cells in a preexisting glioblastoma multiforme. The expression of factor VIII/von Willebrand factor (FVIII/vWF), a marker for endothelial cells, and of glial fibrillary acidic protein (GFAP), a marker for glial cells, was examined in. . . glioma-sarcomas using the peroxidase-antiperoxidase immunohistochemical technique. Hyperplasia of small blood vessels was observed in all 10 glioblastomas; in five, the vascular proliferation had resulted in the formation of prominent glomeruloid structures. FVIII/vWF was detected in the endothelial cells in these vascular structures, but not in the adventitial cells. In the mixed glioma-sarcomas. FVIII/vWF was detected only in endothelial cells; there was no staining for FVIII/vWF in the neoplastic mesenchymal cells. The gliomatous components of the mixed tumors stained intensely for GFAP. These observations indicate that both endothelial and nonendothelial cell types contribute to the small vessel hyperplasia. . .

L9 ANSWER 211 OF 215 MEDLINE
ACCESSION NUMBER: 82275246 MEDLINE
DOCUMENT NUMBER: 82275246 PubMed ID: 7111304
TITLE: The use of a perfusion model for studying aggregation and attachment of platelets and tumor cells at subendothelial surfaces.
AUTHOR: Ordinas A; Marcum J M; McGill M; Bastida E; Jamieson G A
CONTRACT NUMBER: HL 14697 (NHLBI)
HL 20971 (NHLBI)
RR 05737 (NCRR)
SOURCE: PROGRESS IN CLINICAL AND BIOLOGICAL RESEARCH, (1982) 89 373-82.
Journal code: PZ5; 7605701. ISSN: 0361-7742.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198210
ED Entered STN: 19900317
Last Updated on STN: 19970203
Entered Medline: 19821012

AB The Baumgartner perfusion apparatus has been applied to the study of the interaction of platelets and tumor cells and their attachment to subendothelial structures. Cells derived from an anaplastic murine tumor (Hut 20 line) induced platelet aggregation and were included in platelet thrombi that deposited on vascular subendothelium in perfusion experiments with heparinized human blood. In contrast, perfusion of blood samples containing cells from a line derived. . . . of the lung (A549 line), which did not interact with platelets, resulted in the deposition of platelets alone, with no tumor cells or blood cells other than platelets being observed in the thrombus. Extremely large platelet-tumor cell thrombi were found at the vascular surface in Hut 20 perfusions using vessel segments which had been treated with alpha-chymotrypsin. These large heterogeneous thrombi perturbed blood flow through the system and entrapped both erythrocytes and white cells. In order to quantitate the deposition of tumor cells, Hut 20 cells were labeled with 125I-deoxyuridine and perfused in whole blood at a concentration of 3.7x10(5)/ml. Tumor cell incorporation into platelet-tumor cell thrombi on chymotrypsinized segments yielded about 30,000 cpm/mg of vascular tissue but this value was reduced some 2 orders of magnitude by the inclusion of PGE1 (1 ng/ml of perfusing blood; 2.8 microM) in parallel samples. Aspirin at 100 microM reduced tumor cell-dependent platelet aggregation but did not decrease the platelet-dependent deposition of radiolabeled Hut 20 cells on vascular subendothelium, suggesting the release reaction may not be of major significance in this interaction. Tumor cell-induced platelet aggregation was not observed in a perfusion experiment using blood from a patient with severe von Willebrand's disease. However addition of 0.1 vol of ABO-compatible, heterologous plasma as a source of factor VIII to the von Willebrand blood sample restored the platelet-dependent deposition of radiolabeled tumor cells to control values.

L9 ANSWER 212 OF 215 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 1982:242543 BIOSIS
DOCUMENT NUMBER: BA74:15023
TITLE: ELEVATION OF FACTOR-VIII RELATED ANTIGEN AND VON WILLEBRAND FACTOR IN POST MORTEM BLOOD IN VARIOUS DISORDERS THE SIGNIFICANCE IN RELATION TO ANTE MORTEM VALUES.
AUTHOR(S): FUJINO O
CORPORATE SOURCE: FIRST DEP. INTERNAL MED., SCH. MED., UNIV. TOKUSHIMA, TOKUSHIMA, JPN.
SOURCE: SHIKOKU ACTA MED, (1981) 37 (2), 345-355.
CODEN: SKIZAB. ISSN: 0037-3699.
FILE SEGMENT: BA; OLD
LANGUAGE: Japanese

IT Miscellaneous Descriptors
HUMAN GASTRIC CANCER LUNG CANCER PROSTATIC CANCER LEUKEMIA MALIGNANT LYMPHOMA MYO CARDIAL INFARCTION LIVER CIRRHOSIS PLATELET COUNT FACTOR-VIII COAGULANT ACTIVITY FACTOR-VIII RELATED ANTIGEN FIBRIN DEGRADATION PRODUCTS VON WILLEBRAND FACTOR DISSEMINATED INTRA VASCULAR COAGULATION FIBRINOLYSIS

L9 ANSWER 213 OF 215 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.DUPLICATE 167
ACCESSION NUMBER: 81040311 EMBASE
DOCUMENT NUMBER: 1981040311
TITLE: The interaction of platelets, tumor cells, and vascular subendothelium.
AUTHOR: Marcum J.M.; McGill M.; Bastida F.; et al.
CORPORATE SOURCE: Amer. Red Cross Blood Serv. Lab. Bethesda, Md. 20014, United States
SOURCE: Journal of Laboratory and Clinical Medicine, (1980) 96/6 (1046-1053).
CODEN: JLCMAK
COUNTRY: United States
DOCUMENT TYPE: Journal
FILE SEGMENT: 025 Hematology
016 Cancer
037 Drug Literature Index
LANGUAGE: English

AB . . . in vitro by the adaptation of the Baumgartner perfusion technique (ref. 12). Cells derived from a human large-cell epithelial lung cancer (Hut 20 line) induced platelet aggregation and were included in platelet thrombi that deposited on vascular subendothelium in perfusion experiments with heparinized human blood. In contrast, perfusion of blood samples containing cells from a line derived. . . . of the lung (A549 line), which did not interact with platelets, resulted in the deposition of platelets alone, with no tumor cells or blood cells other than platelets being observed in the thrombus. Extremely large platelet-tumor cell thrombi were found at the vascular surface in Hut 20 perfusions using vessel segments which had been treated with .alpha.-chymotrypsin. These large heterogeneous thrombi perturbed blood. . . . When Hut 20 cells were labeled with 125I-deoxyuridine and perfused in whole blood at a concentration of 3.7 X 105/ml, tumor cell incorporation into platelet-tumor cell thrombi on chymotrypsinized segments yielded about 30,000 cpm/mg of vascular tissue. However, this value was reduced some 2 orders of magnitude by the inclusion of PGE1 (1 ng/ml of perfusing blood; 2.8 .mu.M) in parallel samples. Aspirin at 100 .mu.M reduced tumor cell-dependent platelet aggregation but did not decrease the platelet-dependent deposition of radiolabeled Hut 20 cells on vascular subendothelium, suggesting that the release reaction may not be of major significance in this interaction. Tumor cell-induced platelet aggregation was not observed in a perfusion experiment using blood from a patient with severe von Willebrand 's disease. However addition of 0.1 vol of ABO-compatible, heterologous plasma as a source of factor VIII to the von Willebrand blood sample restored the platelet-dependent deposition of radiolabeled tumor cells to control values.

L9 ANSWER 214 OF 215 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 78262740 EMBASE
DOCUMENT NUMBER: 1978262740
TITLE: Platelet interactions.
AUTHOR: Niewiarowski S.; Stewart G.J.
CORPORATE SOURCE: Electr. Microsc. Sect., Spec. Cent. Thromb. Res., Temple Univ. Hlth Scis Cent., Philadelphia, Pa., United States
SOURCE: Comprehensive Therapy, (1978) 4/1 (29-38).

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                    CODEN: COTHD3
COUNTRY:            United States
DOCUMENT TYPE:      Journal
FILE SEGMENT:       038     Adverse Reactions Titles
                    005     General Pathology and Pathological Anatomy
                    037     Drug Literature Index
                    025     Hematology
LANGUAGE:           English
AB    . . . pathology. This article, with 8 electron micrographs and a table
      listing the possible involvement of platelets in arterial thrombi and
      vascular injuries provides a valuable review of this subject.
      After demonstrating the ultrastructure of the platelets and describing the
      main platelet. . . mechanism. The interaction of platelets with
      thrombin, polymerizing fibrin, collagen and subendothelial structures is
      also discussed. The questions of v. Willebrand factor,
      antibodies leukocytes, tumor cell, viruses and bacteria as
      interacting with platelet aggregation and function followed by platelet
      abnormalities, congenital platelet disorders, acquired dysfunctions. . .

L9   ANSWER 215 OF 215  BIOSIS  COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER:   1976:117922  BIOSIS
DOCUMENT NUMBER:    BA61:17922
TITLE:              PLATELET PHYSIOLOGY AND ABNORMALITIES OF PLATELET FUNCTION
                    PART 2.
AUTHOR(S):          WEISS H J
SOURCE:             N ENGL J MED, (1975) 293 (12), 580-588.
                    CODEN: NEJMAG. ISSN: 0028-4793.
FILE SEGMENT:       BA; OLD
LANGUAGE:           Unavailable
IT   Miscellaneous Descriptors
        HUMAN COLLAGEN ADP RISTOCETIN HEMATOL-DRUG VON WILLEBRANDS
        DISEASE BERNARD SOULIER SYNDROME THROMBASTHENIA ASPIRIN INGESTION
        STORAGE POOL DISEASE INFLAMMATION IMMUNOLOGIC PROCESSES
        VASCULAR PERMEABILITY TRANSPLANTATION REJECTION DIABETES HYPER
        LIPO PROTEINEMIA ISCHEMIC HEART DISEASE SMOKING ATHERO SCLEROSIS
        EXPERIMENTAL TUMORS


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=> s homophyllic
L1            1 HOMOPHYLLIC

=> dis l1 ibib abs kwic

L1   ANSWER 1 OF 1  BIOSIS  COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER:   1980:166974  BIOSIS
DOCUMENT NUMBER:    BA69:41970
TITLE:              VIOLET STUDIES 1. TO 4.
AUTHOR(S):          MERXMUELLER H
CORPORATE SOURCE:   INST. SYST. BOT., MENZINGERSTR. 67, D-8 MUENCHEN 19, W.
                    GER.
SOURCE:             PHYTON (HORN), (1974 (RECD 1979)) 16 (1-4), 137-158.
```

CODEN: PHYNAZ. ISSN: 0079-2047.
FILE SEGMENT: BA; OLD
LANGUAGE: German
AB The **homophyllic** Altaicae of the Mediterranean area can be classified in a Sicilian[Italy]-North African group 2n = 20 (Nebrodenses) and a mid-Italian group with 2n = 34 (Pseudograciles). The corresponding forms with 2n = 52 may be interpreted with a high degree of probability as allopolyploids of these 2 groups. The heterophyllic Eucalcaratae of Italy may be separated from these and generally have 2n = 40; the Gargano plants with 2n = 20 form an exclave of the Graeca group which is also assigned to the Eucalcaratae. Origination of the Corsardinian forms with 2n = 52 may only be surmised.
AB The **homophyllic** Altaicae of the Mediterranean area can be classified in a Sicilian[Italy]-North African group 2n = 20 (Nebrodenses) and a mid-Italian. . .

=> s homophylic
L2 16 HOMOPHYLIC

=> dup rem l2
PROCESSING COMPLETED FOR L2
L3 6 DUP REM L2 (10 DUPLICATES REMOVED)

=> dis l3 1-6 kwic

L3 ANSWER 1 OF 6 MEDLINE DUPLICATE 1
AB . . . adhesion molecules localized at the level of adherens junctions, which play a major role in cell adhesiveness by mediating calcium-dependent **homophylic** interactions at sites of cell-cell contacts. Recently, E-cadherins have been also implicated in a number of biological processes, including cell. . . 3-kinase/Akt signaling cascade. Using Madin-Darby canine kidney cells as a model system, we show here that engagement of E-cadherins in **homophylic** calcium-dependent cell-cell interactions results in a rapid PI 3-kinase-dependent activation of Akt and the subsequent translocation of Akt to the. . .

L3 ANSWER 2 OF 6 MEDLINE DUPLICATE 2
AB . . . with cytoplasmic proteins, termed catenins because they link E-cadherin to the actin cytoskeleton. E-cadherin/catenin-mediated intercellular adhesion and communication is mainly **homophylic** homotypic. There is compelling evidence from experiments in vitro as well as in vivo to accept that the E-cadherin/catenin complex. . .

L3 ANSWER 3 OF 6 MEDLINE DUPLICATE 3
AB . . . MEMD, is identical to activated leukocyte cell adhesion molecule (ALCAM), a recently identified ligand of CD6. ALCAM is involved in **homophylic** (ALCAM-ALCAM) and heterophylic (ALCAM-CD6) cell adhesion interactions. We have studied MEMD/ALCAM cell-cell interactions between human melanoma cells. The expression of. . . the melanoma cell lines analyzed are all CD6 negative, these results strongly suggest that MEMD/ALCAM is an adhesion molecule mediating **homophylic** clustering of melanoma cells. MEMD/ALCAM expression is not restricted to subsets of leukocytes and melanoma cells, it can also be. . .

L3 ANSWER 4 OF 6 BIOSIS COPYRIGHT 2001 BIOSIS
IT Miscellaneous Descriptors
angiogenesis; **homophylic** interendothelial junctions; intracellular adherns junction; Meeting Abstract; Meeting Poster

L3 ANSWER 5 OF 6 MEDLINE DUPLICATE 4
AB In various cell systems, an inverse relationship was found between expression of E-cadherin, a molecule involved in the Ca(2+)-dependent **homophylic** cell-to-cell attachment of epithelial cells, and the capacity to invade extracellular matrix gels or normal tissues in vitro. DHD/K12/TRb (PROb). . .

L3 ANSWER 6 OF 6 BIOSIS COPYRIGHT 2001 BIOSIS
AB Adaptational transformations of macro- and microstructure in **homophylic** and heterophylic species of the crowfoot were studied in connection with their change for the water way of life. The. . . conditions. The forced change for the terrestrial life is accompanied by reducing the plant life cycle to one year. The **homophylic** and heterophylic crowfoots are two independent lines in hydrophylous adaptation inside the genus.

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